Understanding Interracial Closeness, Racial Policy Attitudes, and Children's Academic Achievement through the Prism of Racial Frameworks

by

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Dedication

To My Mom

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Abstract

Despite their growing presence in the U.S. population, Asians receive little mainstream attention, and the images portrayed of the group reinforce old stereotypes of the "model minority" or the "perpetual foreigner." Moreover, due to the inherent difficulties in collecting nationally representative data on Asians, they have frequently been omitted from important research on racial attitudes and child outcomes. Hence, the dissertation aims to understand whether and how racial frameworks of Asian Americans influence 1) interracial closeness; 2) attitudes toward race-conscious policies; and 3) the educational achievement gap among children. The dissertation follows a "three-essay" format, where each chapter stands independently but has a shared theme of the relevance of racial frameworks involving Asian Americans.

Chapter 2 examines and finds support for the main thesis that the two dimensions of the racial triangulation theory—the superior-inferior and the outsider-insider axes—are associated with the relative affinity individuals feel between two outgroups. Results support the hypothesis that racial stratification is multidimensional and that the relative valorization and exclusion of Asians function to distance and divide minority groups for the sake of preserving the existing racial order. Chapter 3 looks at attitudes toward racial policies such as affirmative action via racial triangulation. It also explores whether feelings of closeness as an outgroup identifier and re-categorization tool encourage cross-racial support for policies that advance minority interests. Results show that symbolic racism and political ideology are the most consistent and salient predictors of people's opinions on affirmative action policies. There is partial support for the role of legitimizing myths in explaining attitudes toward affirmative action.

Chapter 4 draws on knowledge from the theories of stereotype threat and promise to explain how teachers' evaluation of children and parents' educational expectations influence children's self-efficacy and internalizing behaviors, which in turn affect their academic achievement. Results show that adult perceptions were indeed biased in favor of Asian children. However, parental expectations did not explain Asian children's academic achievement; whereas Black parental expectations were found to be effective in buffering the negative effects of low teacher expectations, reducing the internalizing behaviors of Black children, and raising their academic performance.

Chapter 1

Introduction

BACKGROUND AND PURPOSE OF THE DISSERTATION

Asian Americans[1] are the fastest-growing racial group in the U.S. with a 46-percent growth of the population between 2000 and 2010 (Pew Research Center, 2012; U.S. Census Bureau, 2012, 2013). There were approximately 18.2 million Asian Americans in the U. S. in 2011, comprising 5.8 percent of the total U.S. population (Pew Research Center, 2012). Prior to the Immigration and Nationality Act of 1965 (Hart-Celler Act, Pub.L. 89-236), which abolished the national origins quota system of 1924, Asian Americans made up less than one percent of the total U.S. population (Aoki & Takeda, 2008). With the 1965 immigration reform, however, the group has seen unprecedented population growth over the past half century. In 2010, Asians were the largest group (36%) of new immigrants to the U.S., outnumbering their Hispanic[2] counterparts (31%)—another big turnaround in immigration since Hispanics were three times as large as Asians among the new immigrant population in 2000 (Kieu, 2013). Thus, approximately three-fourths of Asian Americans who are 18 and older in the U.S. today are foreign born (Pew Research Center, 2012).

Despite the growing presence of Asians in the U.S., the group receives little mainstream attention; and in the cases they do, the images portrayed of the group reinforce old stereotypes of

[1] Based on the guidance of the U.S. Office of Management and Budget (OMB), the U.S. Census Bureau defines "Asian" as persons from East Asia, Southeast Asia, or the Indian subcontinent, including Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam (U.S. Census Bureau, 2012). Since the census includes both U.S. citizens and non-citizens (as well as the undocumented), the Pew Research Center (2012) defines Asian Americans as Asians living in the U.S. regardless of immigration status. In this paper, I follow the definitions provided by both the U.S. Census and the Pew Research Center.

[2] While there is a debate about whether Hispanics and Latinos should be used interchangeably, this dissertation employs the first term and occasionally uses the latter in reference to the same population.

the "model minority" or the "perpetual foreigner." Advocates and scholars argue that the two powerful frameworks—model minority and perpetual foreigner—significantly contribute to the invisibility of the group to politicians, administrative officials, and the media (Aoki & Takeda, 2008; Cheng & Thatchenkery, 1997; Chou & Feagin, 2008; Kim, 1999, 2004; Tuan, 1999).

The Model Minority Image

The model minority stereotype portrays Asian Americans as a successful minority group that has overcome structural barriers and achieved educational and occupational outcomes, as well as income levels, on par with those of Whites. However, repeated portrayals of Asian Americans as a success story in mainstream media since the 1960s led to sharp criticisms, especially in the 1990s. Critics argue that aggregate statistics on income, education, and occupation give an incomplete picture of the reality of Asian Americans (CACF, 2011; Cheng, 1997; Tang, 1997; Xiong & Joubert, 2012). Once numbers are disaggregated, the more dismal reality of Asian Americans surface. First, critics point to the selective immigration policy of the 1960s which favored the educated and skilled immigrants from Asian countries that inflated the average educational, occupational, and financial outcomes of Asian Americans (Bouvier & Gardner, 1986; Fawcett & Carino, 1987). Also, they note how there is a bimodal pattern, where some Asian Americans live up to the expectations of the model minority phenomenon and others lag seriously behind (Aoki & Takeda, 2008; Cheng, 1997; Tong, 2004).

For instance, according to recent data collected by the Pew Research Center (2012), approximately 12% of all Asian Americans lived below the poverty line compared to 10% of all non-Hispanic White Americans. While the numbers are higher for Hispanic or African Americans, the share of the population living below the poverty line can rise up to 20% (Hmong, Bangladesh) depending on the country of origin among Asian Americans (Adams, 2012). Also, several studies show concern that the model minority image masks problems and challenges faced by Southeast Asian communities, who generally lag behind other Asian American subgroups on outcomes related to education, occupation, and income (Aoki & Takeda, 2008; CACF, 2011; Xiong & Joubert, 2012; Ying & Han, 2008). While aggregate data show that 50% of all Asian Americans 25 and older obtained at least a bachelor's degree, compared to 28% for all Americans and 34% for White Americans in 2010 (U.S. Census Bureau, 2012), only about five percent of Laotians and Cambodians had at least college education (Le, 2010). In contrast,

approximately 71% of Indian Americans had at least a bachelor's degree (Ogunwole et al., 2012).

Even for those Asians who are considered successful minorities, research shows that a critical glass ceiling (also known as the "bamboo ceiling") exists (Aoki & Takeda, 2008; Cheng, 1997; Chou & Feagin, 2008; Min, 1995; Takaki, 1990; Tang, 1993, 1997). Regardless of nativity, Asian Americans face challenges in career mobility and have lower educational returns on investment compared to Whites; also, Asians were behind Whites and Blacks in career promotions in the science and engineering field—that is, of the three races, Asians had the lowest percentage of science and engineering professionals entering managerial and administrative positions[3] (Tang, 1993, 1997). Recent studies also confirm that the bamboo ceiling is as real today as it had been in the past for Asian Americans (Chou & Feagin, 2008; Hewett, 2011). Despite impressive statistics that Asians comprise 15-21% of incoming students at Ivy League schools, Asians represent only about 1.5 percent of Fortune 500 CEOs, which is also less than their share of the U.S. population at 5.8% (Le, 2010; Hewett, 2011). Hewett (2011) argues that Asians who graduate from top universities face challenges when asking for promotions in corporations, as White managers feel more comfortable with White candidates and have a preconceived notion that Asians are too soft to be fit for a leadership position. Thus, compared to Whites, Asian males are more than three times as likely to contemplate switching to a new job in the following year, while Asian females are 40 percent more likely to quit within a year (Hewett, 2011).

Moreover, critics note that the model minority framework can backfire for those Asians who do not fit the mold and expectations of Whites (Chou & Feagin, 2008; Wu, 2003). For instance, it is not only acceptable but positive for Whites to have traits such as being direct, confident, and risktaking; however, if Asians display the same traits, they can be penalized for stepping out of the familiar model minority stereotype of being indirect, quiet, and docile (Cheng & Thatchenkery, 1997; Chou & Feagin, 2008; Hewett, 2011; Wu, 2003). Also, if we compare the median household income of Asians to that of Whites *after* taking into account the average number of persons per household for both races, we find that Asians have more persons per

[3] In absolute numbers, there are many more Asian Americans entering the field of engineering and science than African Americans. However, African Americans have proportionally more professionals promoted to management and administrative positions (28%) than Asian Americans (22%).

household, meaning that more people are working in a typical Asian American household to reach a household income level comparable to that of Whites (Aoki & Takeda, 2008).

Thus, critics argue that the model minority image does more harm than good since it creates the illusion that all disadvantaged minorities can achieve the "American Dream," even when numbers point to the contrary (Aoki & Takeda, 2008; Chou & Feagin, 2008; Tang, 1997; Xiong & Joubert, 2012; Ying & Han, 2008). According to these scholars, it is not a coincidence that the model minority myth suddenly appears in the mid-1960s, overlapping with the Civil Rights Movement and the Great Society. As a counterframe to minority movements and affirmative action policies that flourished during the 60s and 70s, mainstream politicians, journalists, and scholars singled out Asian Americans as a success case and proof that the American system guarantees upward mobility and fair opportunity to those who work hard and abide by the laws (Aoki & Takeda, 2008; Chou & Feagin, 2008; Wu, 2003).

As Wu (2003) and Kim (2004) sharply point out, the model minority myth not only covers up racial discrimination but it also instigates racial tensions among minority groups. Kim (1999, 2004) uses the term "pawns," or "middlemen" to refer to the role that Asians play under the model minority framework. Other minority groups, such as Blacks, tend to feel alienated from Asians who are being treated as "honorary Whites" (Tuan, 1999). Perceived as "allies" of Whites, Asians become the target of hostility and violence (Wu, 2003). A real-life example would be the "1992 L.A. Civil Unrest" (more commonly known as the L.A. Riots). Kim critically analyzes the event from the perspective of systematic racism and argues that racial tensions and conflict between Black patrons and Asian merchants were the result of long-term discrimination of both minority groups by Whites:

> Asian Americans serve as pawns in the racially oppressive system maintained at the top by whites. White Americans may prize Asian Americans relative to African Americans in certain limited ways so as to ensure white dominance over both. Whites may place or consider Asians as 'nearer to whites,' a relative valorization, because of Asian American achievements in certain educational and economic areas. Yet this middling status is possible only because other Americans of color, such as African Americans or Mexican Americans, have been allowed fewer opportunities by whites (Kim, 2004, p.17).

Thus, the model minority framework serves a "divide and conquer" strategy for Whites.

Perpetual Foreigners

Another strong racial framework that affects the everyday lives of Asian Americans is that of the "forever foreigner" (Tuan, 1999). The term was coined by Tuan (1999) in her book, "Forever Foreigners or Honorary Whites? The Asian Ethnic Experience Today." Asian Americans, regardless of ethnicity or nativity, are asked the same question almost every time they meet an American of another race for the first time: "Where are you *really* from?" Wu (2003) expresses the frustration of having to give the answer the asker wants, only to reinforce stereotypes. He also points out that even when many Whites have grandparents who are immigrants, they fail to see why the question is problematic and unacceptable. Whites are assumed to be American, and are rarely asked the same question of origin. Asians, on the other hand, are often assumed to be foreigners, and are rarely considered Americans even if they speak perfect English without an accent (Chou & Feagin, 2008; Wu, 2003). The daily events accumulate and take a toll on the people subjected to it. They are reminded constantly that they "cannot be a real American" irrespective of how they see themselves.

A common argument made in defense of the perpetual-foreigner framework is that the "origin" questions are merely reflections of the "current state of Asian America" (Aoki & Takeda, 2008, p.143). With more than 70% of Asian Americans being foreign-born, it is natural, not racist, to make the assumption that Asians are foreigners. Aoki and Takeda (2008) argue, however, that even when native-born Asians were the majority of the Asian American population, which was before the 1965 immigration reform, Asians were still considered "exotic" and "foreign." Portraying Asians as "untrustworthy outsiders" who can never be "real Americans" can result in atrocities such as the Japanese American Interment during WWII.

Racial Stratification and Asian Americans

Existing research on racial stratification, intergroup relations, policy attitudes, and individual well-being have developed around the beliefs, attitudes, and behaviors of Whites toward Blacks. However, the growing presence of Hispanics and Asians since the Immigration and Nationality Act of 1965 has motivated scholars to pay more attention to other minority groups in the past couple decades.

Despite the significance of Hispanics in the U.S. racial hierarchy, this dissertation focuses on Asian Americans in relation to Whites and Blacks for interpretative clarity and

empirical testing of the theories of racial triangulation, stereotype threat, and stereotype promise. Compared to Blacks, Asians are a group who continue to experience rapid population growth through immigration; compared to Hispanics, over half of whom are of Mexican ancestry, not a single ethnic group makes up more than a quarter of the total Asian population in the U.S. (Aoki & Takeda, 2008). Thus, Asian Americans face a unique set of challenges: They are viewed as "foreigners (outsiders)" but have problems forming a common identity to influence politics because of the small size and high internal diversity within the population. Hence, Asians are susceptible to how others define them and are often trapped in between the dual images of foreigners and model minorities: The relative position of Asians on the racial order shifts depending on the image associated with them; and the shifting racial dynamics Asians encounter on a daily basis often hurts the well-being of individual group members, especially that of children and youth (Cohen, 2007; Chou & Feagin, 2008; Le, 2010; Nhan, 2012).

Eric Liu, former speechwriter for Bill Clinton and author of "A Chinaman's Chance," sharply points out that there is an "intellectual laziness" among activists and scholars when they refer only to Hispanics and Blacks when talking about minorities and that this laziness or "willful blindness" occurs because Asians are either an "afterthought" or a "useful pawn" (Eric Liu, 2014; as cited by Mak, 2014). Asians are often cast as "objects used to prove a political point about other ethnic groups" rather than as the group whose interest is at the center of attention; for instance, when White activists seek to challenge affirmative action, the minority status of Asians is suddenly highlighted, whereas when other activists seek to promote affirmative action, they tend to leave Asians out of the diversity argument (Mak, 2014).

Hence, this dissertation aims to understand whether and how racial frameworks on Asian Americans influence 1) interracial closeness; 2) attitudes toward race-conscious policies (i.e., affirmative action); and 3) the educational achievement gap among children.

ORGANIZATION OF THE DISSERTATION

The dissertation examines how racial stratification and system-legitimizing stereotypes are associated with relative outgroup psychological distance, racial policy preferences, and child educational outcomes. It follows a "three-essay" format, where each chapter stands independently but has a shared theme of the relevance of racial frameworks involving Asian Americans. The main theoretical framework for Chapters 2 & 3 is the racial triangulation theory

of Asian Americans; while the theories of stereotype promise and stereotype threat guide the work in Chapter 4.

According to Claire Kim's racial triangulation theory, Asian American racial stratification is a relative and multidimensional phenomenon. There are two dimensions that explain the racial positioning of Asian Americans relative to the positions of Whites and Black. The first dimension is represented by the *superior-inferior axis*: Asians are relatively praised as the model minorities who have overcome structural barriers via hard work ethics and strong family values. Hence, Asians are positioned between Whites and Blacks. The *outsider-insider axis*, on the other hand, portrays Asians as perpetual foreigners and excludes them from civic and political participation.

Chapter 2 examines whether these two dimensions of racial triangulation are associated with the relative closeness an individual feels toward two racial outgroups. The model minority stereotype of Asians was proxied by people's perceptions of Asians as more hardworking than Blacks; whereas the perpetual foreigner stereotype of Asians was proxied by whether one needs to be born in the U.S. to be considered a "true American." The study examined three models: One for Whites; another for Asians, and the third for Blacks. It is hypothesized that the model minority stereotype, which positions Asians above Blacks, will be associated with relatively closer feelings of Whites and Asians toward each other than to Blacks, while alienating Blacks from Asians. Meanwhile, the perpetual foreigner stereotype excludes Asians from the inner sociopolitical circle of "true Americans." Hence, Asians internalizing this image is expected to feel marginalized and identify more with Blacks; whereas Blacks and Whites who endorse the stereotype will distance themselves from Asians relative to each other.

Chapter 3 aims to explain stances on race-conscious policies such as affirmative action through the framework of racial triangulation. The study also explores whether feelings of closeness as an outgroup identifier and re-categorization tool encourage cross-racial support for policies that advance minority interests.

Chapter 4 draws on knowledge from the theories of stereotype threat and promise to explain how teachers' evaluation of children and parents' educational expectations influence children's self-efficacy and internalizing behaviors, which in turn affect their academic achievement. According to stereotype threat, prevalent negative racial stereotypes of Blacks psychologically burden them to the point of hurting their actual performance on a task, as they

become self-conscious and fearful that they will conform to such negative stereotypes. In contrast, stereotype promise predicts positive academic performance by Asians who are expected to succeed by significant adults, such as teachers and parents. Therefore, the chapter examines whether 1) Asian children academically outperform other groups, receive more positive teacher feedback and parental expectations, and exhibit higher self-efficacy than their non-Asian peers; 2) the relationship between adult perceptions and children's academic outcomes are mediated by children's psychological states, such as the level of self-efficacy and internalizing problems; and 3) there are racial and ethnic differences in how the predictors are associated with children's academic achievement. Among the four racial and ethnic groups, the study is primarily interested in the patterns of Asians and Blacks. A longitudinal repeated measures analysis is run given that the same children were observed repeatedly over three time points.

SIGNIFICANCE OF THE DISSERTATION

Asian Americans have frequently been omitted from important research on racial prejudice, racial attitudes, and child outcomes, partly due to the inherent difficulties in collecting nationally representative data on this relatively small but diverse racial group. Not only are Asian Americans internally diverse—with the six largest ethnic groups comprising 85 percent of the total Asian American population but no group constituting more than 24 percent—but they are also geographically concentrated—10 states account for three-fourths of the Asian population in the U.S. (U.S. Census Bureau, 2012, 2013). Thus, given the group's ethnic and linguistic diversity and concentration, it becomes expensive and complicated to collect a nationally representative sample of Asian Americans (Gao, 2016). Consequently, many of the reputable, large datasets with nationally representative samples lump Asian Americans in the "other" category. The few datasets that do have a separate Asian-American category do not have enough observations to run regression analyses.

This dissertation, however, contributes to the current body of knowledge, mainly developed on our understanding of Whites and Blacks, by conducting an in-depth *empirical* analysis of Asian Americans using two national datasets with sufficient Asian American samples. Specifically, to the best of my knowledge, no work to date has quantitatively examined how racial frameworks of Asian Americans are associated with interracial feelings, racial policy attitudes, and child outcomes. Moreover, it is also one of the first attempts to model the

relationship between *relative* group positions and racial attitudes or child outcomes and to empirically test the multidimensional aspect of Asian American racial stratification, challenging the conventional, linear racial hierarchy model. While the focus is on understanding how the relative group position of Asians influence racial dynamics, attitudes, and individual outcomes, the dissertation incorporates the perspectives and responses of all racial groups in the analyses and not just those of Asian Americans.

DATA USED FOR EMPIRICAL EXAMINATION

There are two datasets for the dissertation. The first is the National Politics Study (NPS, 2004)[4] used in Chapters 2 and 3 for the cross-sectional analyses of relative feelings of interracial closeness and racial policy attitudes of Whites, Blacks, and Asians. The second is the Early Childhood Longitudinal Study-Kindergarten Class of 1998 (ECLS-K), Waves 5 through 7 (2002 to 2007), used in Chapter 4.

Both datasets were chosen as they satisfied two essential conditions necessary for the secondary data analyses of the studies in the dissertation. One is that both datasets have a sizeable sample of Asian Americans. The NPS collected data via telephone surveys on a total sample of 3,339 respondents, of which 919 were non-Hispanic White; 756 African American; 404 Caribbean Black; 757 Hispanic; and 503 Asian. The ECLS-K, on the other hand, collected a nationally representative sample of children who entered kindergarten in 1998 and followed them through eighth grade with a substantial number of Asian American children (n=540). The second condition these datasets satisfy is that there are items that could be operationalized as proxies for the model minority and perpetual foreigner stereotypes (Chapters 2 and 3) or measures that enable inferences to be drawn from these racial frameworks, such as teacher perceptions, parental expectations, and children's psychological states (Chapter 4).

Hence, both the NPS and ECLS-K provide unparalleled opportunities to conduct analyses on adults and children across all racial and ethnic groups, including Asian Americans, with respect to the relevance of racial frameworks.

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[4] Jackson, James S., Vincent L. Hutchings, Ronald Brown, and Cara Wong. National Politics Study, 2004. ICPSR24483-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-03-23. http://doi.org/10.3886/ICPSR24483.v1

Chapter 2

Do Racial Stereotypes Explain Interracial Closeness?: The Image of Asian Americans as Model Minorities and Outsiders

INTRODUCTION

The election of America's first Black president had optimistic political pundits predicting the arrival of a "colorblind" society and the "end of race as we know it." The term "post-racial" appeared ubiquitously in the media and in public discourse during President Obama's first term. More recently, however, the controversial deaths of Black Americans by police and subsequent state actions that failed to hold the officers accountable have renewed national debates on institutional racism, racial profiling, and police brutality against minorities. Today, racial tensions continue to escalate with each new case of fatal shootings of Blacks by law enforcement and the racial divide in public opinion on who is to blame is widening, particularly between Blacks and Whites.

In light of today's tragic events, the present study attempts to understand how racial stratification and the legitimizing myths of racial differences correlate with how people perceive and relate to others classified as a different race. Modern scientific evidence shows that race does not have a biological basis—all humans belong to the same species and there is no genetic marker unique to a racial group[5] (Fuentes, 2012; Lewontin, 2006; Sussman, 2014; Yudell et al.,

[5] According to scholars, ancestry is a more powerful predictor of certain genetic traits, such as susceptibility to sickle-cell anemia, than race; while the disease is commonly associated with Blacks, sickle cell occurs more frequently among people who have ancestral backgrounds in West Africa, the Mediterranean Basin, the Arabian Peninsula, or the Indian subcontinent, where populations presumably have evolved to develop sickle cell in order to resist malaria (Sussman, 2014; Yudell et al., 2016). Thus, the observed differences that are frequently—and incorrectly—tied to race are a result of the interaction among factors that are biological as well as historical and environmental (Fuentes, 2012; Sussman, 2014). Genetically, individuals within a race are more diverse than across races and there are no clear-cut biological boundaries that delineate races; moreover, only about 0.01 percent of genes accounts for

2016). Nonetheless, race as a social construct has had real consequences for the socioeconomic outcomes, political influence, and even the health and safety of individuals classified into different racial categories. Racial divides persist because societal myths reinforce and perpetuate the idea that people grouped based on phenotype share the same biological, historical, sociocultural, and behavioral traits. These myths help consolidate and sustain the power and privilege of the ruling elites and dominant class (Kim, 1999; Masuoka & Junn, 2013; Sussman, 2014).

Existing research on racial stratification and intergroup relations have developed around the beliefs, attitudes, and behaviors of Whites toward Blacks. However, the growing presence of the non-White population in the U.S., particularly since the Immigration and Nationality Act of 1965 (i.e., the Hart-Celler Act), has prompted scholars to expand the horizon of racial stratification research beyond the traditional "Black-White" binary to include Asians and Latinos. Undoubtedly, Latinos are a salient group whose stratification in the U.S. racial hierarchy and its effects deserve an in-depth examination. However, for the purposes of interpretative clarity and application of the racial triangulation theory (Kim, 1999) to empirical data, the present study focuses on Asian Americans[6] and on where they fit in the sociopolitical and racial landscape that has been unraveling between Whites and Blacks in America since its inception. Specifically, this chapter looks at how the relative positions of Whites, Blacks, and Asians influence the psychological distance—feelings of closeness—among these groups.

BACKGROUND

Research on prejudice, stereotypes, and discrimination flourished after World War II, in an effort to explain the historical atrocities against minority groups, such as those against Jews by the Nazis (Vescio & Weaver, 2013). Rich social psychological knowledge from generations of scientific research suggest that people tend to possess a positive bias toward ingroup members

differences in appearance, such as skin color, eye color, hair color and texture, nose shape and size, and height (Lewontin, 2006).

[6] Based on the guidance of the U.S. Office of Management and Budget (OMB), the U.S. Census Bureau defines "Asian" as persons from East Asia, Southeast Asia, or the Indian subcontinent, including Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam (U.S. Census Bureau, 2012). The census includes both U.S. citizens and non-citizens (as well as the undocumented). Hence, Asian Americans are defined as Asians living in the U.S. regardless of immigration status.

while often exhibiting negative or ambivalent attitudes to outgroup members, regardless of how arbitrary the distinction is among groups (Tajfel & Turner, 1979; Tajfel, 1981). According to Hewstone, Rubin, and Willis (2002), intergroup bias is this "systematic tendency to evaluate one's own membership group (the ingroup) or its members more favorably than a nonmembership group (the outgroup) or its members. (p.576)." Social psychologists further define stereotypes as the cognitive, prejudice as the affective, and discrimination as the behavioral components of this bias (Eagly & Chaiken, 1998; Fiske, 1998; Mackie & Smith, 1998; Wilder & Simon, 2001)[7]. That is, stereotypes are the *mental images* of a certain group of people (Lippmann, 1922). They are problematic because regardless of how accurate stereotypes can be in describing group characteristics, they cannot account for every individual in a group; thus, using stereotypes, positive or negative, can lead to an inaccurate, overgeneralized, and unfair evaluation of an individual (Fiske, 1989; Stangor, 1995, 2009). Prejudice, on the other hand, is a negative *attitude or feeling* toward a group or individuals based on their affiliation with the group (Stangor, 2009). And lastly, discrimination is the biased *action or behavior* towards a group or individual based on their group membership. Historically, dominant groups have capitalized on intergroup bias to justify unequal social structures and preserve their power and privilege.

Conventional Theories on Intergroup Bias

There are several explanations for the tendencies of ingroup favoritism and outgroup hostility or ambivalence. In the late 40s and 50s, researchers found that individuals with authoritarian personalities—those who were rigid, conservative, blindly submissive to authority, and conforming—were more likely to perceive outgroups as inferior and threatening and be aggressive towards them (Adorno et al., 1950). Researchers argued that individuals with strict, critical, and harsh parents developed authoritarian personalities because they were unable to express hostility toward their domineering parents as children; instead, they would release this inner aggression on weaker, safer targets, such as racial and ethnic minorities (e.g., Blacks and Jews).

[7] However, students of prejudice tend to adopt a more overarching definition that describes prejudice as "a negative attitude, with cognitive, affective, and behavioral components" (Fiske, 1998, p.372).

However, Herbert Blumer (1958), a sociologist, challenged this focus on individual feelings to explain racial prejudice. He argued, "the body of feelings, which scholars today, are so inclined to regard as constituting the substance of race prejudice is actually a *resultant* [emphasis added] of the way in which given racial groups conceive of themselves and others" (p.3). According to Blumer's group position theory, focusing on individual experiences and feelings of antipathy, hatred, or intimacy causes us to miss the bigger picture of how racial prejudice arises from a structural relationship that positions groups along a social hierarchy that not only subordinates but also excludes racial and ethnic minorities. In forming a sense of group position, individuals regarded as representing the dominant group, such as politicians, government officials, and intellectual and social elites, create images and beliefs about the subordinate outgroups in the public arena, typically through the media. This collective process of defining and redefining racial groups necessarily entails individuals of the dominant group to 1) racially identify with their own group and categorize others (racial identification); and 2) define the conception and position of their group *vis-à-vis* those of the subordinate outgroups.

Contrary to prior beliefs, individual members of the dominant group can vary in their personal feelings and attitudes toward subordinate groups, ranging from being charitable, polite, and considerate to being outright hostile and bitter. However, it is when the sense of group position, formed collectively and in relation to outgroups in public discourse, is challenged that people of the dominant group show racial prejudice. That is, racial prejudice should be understood in the context of groups *vis-à-vis* groups and not in that of individual to individual. A person of a subordinate racial group can be objectively more successful and accomplished than an individual from a dominant group; but because the latter shares a sense of group position with the more powerful, elite members of the dominant group, she perceives the subordinate racial groups as being inferior, alien, and unqualified for the privilege, power, and economic advantage of the dominant group, regardless of her personal encounters or experiences with individuals who do not conform to her abstract images and beliefs about the racial outgroups. A sense of group position, therefore, guides and shapes how people perceive and react to racial outgroups; it provides a collective, normative, and abstract framework for where groups "belong" (i.e., "what ought to be" than "what is") (Blumer, 1958, p.5). Racial prejudice then can be understood as a defensive reaction to the challenge to the superiority, familiarity, exclusive status, privilege, power, and economic advantage of the dominant group.

Closely related to group position theory but more narrowly focused on group threat and resource competition is the realistic conflict theory, developed by Muzafer Sherif in the early 50s and advanced by scholars such as Lawrence Bobo. In his famous Robber's Cave field experiment, Muzafer Sherif (1955, 1961) showed that intergroup conflict happens when groups compete for scarce resources. When individuals (e.g., fifth graders in the Robber's Cave experiment) were randomly divided into groups, given sufficient time to bond with their group members, and pushed to compete for scarce resources against the outgroup members, Sherif and colleagues (1955, 1961) found that these individuals formed a common group identity; developed negative feelings and aggressive behaviors toward the outgroup; and portrayed the ingroup in a positive light while negatively stereotyping the outgroup. Bobo (1999) advances the realistic conflict model by extensively analyzing and applying Blumer's group position model to empirical sociological research. Bobo developed empirical measures of perceived competitive group threat, incorporated the perspectives of not only the dominant group but minority groups, examined the relationship between competitive group threat and policy attitudes, and explained Whites' changing racial attitudes from a group position viewpoint.

Meanwhile, the social identity and the self-categorization theories (Tajfel et al., 1971; Tajfel & Turner, 1986; Turner, 1975) have argued that even in the absence of threat, people form ingroup favoritism and outgroup derogation when divided into groups, regardless of how arbitrary and artificial the classification is. According to social identity theory, there is an innate tendency among people to maintain a positive sense of self (i.e., self-esteem) and that of the ingroup—the "extended self." This is achieved by favoring and justifying the desirability of one's own group and by excluding and overexaggerating the undesirability of the outgroup(s) (Brewer & Brown, 1998; Tajfel & Turner, 1986).

Changes in Social Norms and Expressions of Bias

Scholars have also noted the change in intergroup bias and attitudes over time. The Civil Rights Act of 1964 shifted social norms, rendering overt racism obsolete and unacceptable. Past studies have traced such change in ethnoracial attitudes via surveys since the 50s (Hyman & Sheatsley, 1956; as cited in Samson & Bobo, 2014) and found a dramatic turn in ethnoracial attitudes in the 70s and 80s, where Whites reported strong support for school integration, bans on discriminatory housing practices, and interracial marriage (Schuman, Steeh, & Bobo, 1985;

Bobo et al., 2012). On subtle measures of prejudice, such as the tone of voice or degree of help or punishment, however, Whites continued to show a negative bias towards Blacks than to Whites (Crosby, Bromley, & Saxe, 1980). This discrepancy between what is said (i.e., opposition to racism) and what is actually done (e.g., more helpful assistance to Whites; stricter punishment to Blacks) by Whites prompted scholars to study subtle racism since the 70s, which includes modern, symbolic, and aversive racism (Fiske, 1998).

According to modern racism (McConahay & Hough, 1976) and the closely related symbolic racism (Sears & Kinder, 1971; Sears & McConahay, 1973), anti-Black attitudes have not disappeared but changed form in how they are expressed by Whites due to a change in social norms. Instead of explicitly expressing racist beliefs and attitudes (e.g., the inferiority of Black intelligence), Whites now refer to principle values, such as equal opportunity and freedom of speech, to justify their racial bias on a variety of social and political issues. The modern racism scale measures such symbolic forms of racism by asking whether Whites believe Blacks "have gotten less than they deserve," "should work their way up just like the Irish, Italian, and Jews," or "do not face much discrimination" as they did in the past (Sears & Henry, 2005). While the scale has generated much controversy, it has reliably predicted anti-Black attitudes and stances on racial policies (Sears & Henry, 2005).

Similarly, Gaertner and Dovidio (1986) have noted the conflict between social norms and personal bias in their theories of aversive racism. According to this line of research, most people do not view themselves as racist, endorsing egalitarian values and condemning discrimination. However, when "situational norms are weak, ambiguous, or confusing (i.e., when right or wrong are less clear)" (Fiske, 1998, p.360), even well-intentioned individuals who would normally be aversive to racist behaviors can unconsciously exhibit racist attitudes, since their biases can be explained in a way that does not conflict with their egalitarian self-concept (Gaertner & McLaughlin, 1983; Dovidio, Evans, & Tyler, 1986).

Reducing Bias

In his groundbreaking work on intergroup relations, *The Nature of Prejudice*, Gordon Allport (1954) argued that intergroup contact under certain conditions can help reduce prejudice and intergroup conflict. The four optimal conditions for prejudice-reducing contact are the equal status of majority and minority groups in the contact situation, such as in education, wealth, and

experience; the presence of common goals; the need for cooperation without competition to achieve the common goals; and the support of institutional authorities, such as laws or customs. Contact that is long enough to encourage friendly and comfortable personal interaction between members of the conflicting groups can promote tolerance and acceptance (Allport, 1954). Allport inspired extensive research on intergroup contact and most find support for his claims using varying methods and groups (e.g., racial and ethnic groups, the elderly, the mentally ill, lesbians and gays, etc.) (Pettigrew & Tropp, 2000). However, others find that contact under unfavorable conditions can actually intensify conflict and that the reduction in bias may not necessarily extend to all members of the outgroup (Amir, 1976; Forbes, 1997 as cited in Pettigrew & Tropp, 2006). There are also practical limitations to the contact hypothesis. That is, most conflict arise from unequal status and the most biased individuals do not attempt contact with members of outgroups.

Paolini, Harwood, and Rubin (2010) proposed that negative intergroup contact may be a more powerful predictor of prejudice than positive contact because it makes out-group members' social group more salient during the encounter, the negative contact hypothesis. More importantly for this study, scholars of intergroup contact explore the psychological mechanisms through which contact reduces prejudice. In examining more than 500 studies, Pettigrew and Tropp (2008) sum the three main processes that mediate the relationship between contact and prejudice: contact promotes learning and knowledge about the outgroup (Allport, 1954); reduces threat, fear, and anxiety about the contact (Paolini, Hewstone, Cairns & Voci, 2004; Stephan & Stephan, 1985); and enhances empathy and the capacity to relate to outgroup members (Batson, Early & Salvarani, 1997; Batson, Polycarpou, Harmon-Jones & Imhoff, 1997). With respect to the empathy-inducing role of contact, studies further find that placing oneself in the others' situation and empathizing with them substantially improved people's racial attitudes, regardless of whether situations evoked racial stereotypes (Vescio, Sechrist, and Paolucci, 2003). Pettigrew and Tropp (2008) conclude that while there is evidence for all three mechanisms, support is stronger for the role of affects, such as fear and empathy, than for the role of cognition and knowledge building.

Racial Stereotypes and Intergroup Feelings

The cognitive revolution led social psychological research in the 70s and 80s to focus on cognitive biases (i.e., stereotypes) compared to feelings and evaluations (Dovidio et al., 1996). Ashmore and Del Boca (1981) found that a total of 668 studies had been conducted on stereotypes and stereotyping between 1973 and 1977, far exceeding the amount of research on the topic carried out in the previous 50 years combined. Dovidio et al. (1996) confirmed this trend by observing that more than 1,500 studies on stereotypes and stereotyping had been published between 1983 and 1992. Meanwhile, the ratio of studies on stereotypes versus prejudice was 5:1 between the 70s and the mid-90s (Fiske, 1998).

Scholars have identified two primary functions of stereotypes—namely, the knowledge and justification functions (Crandall et al., 2011; Dovidio et al., 1996). Whereas early conceptualizations of stereotypes and stereotyping focused on the negative aspects of the mental thought process (Lippmann, 1922; Allport, 1954), subsequent research began approaching stereotypes in a neutral manner, depicting them as cognitive schemas that simplify complex realities (Hilton & von Hippel, 1996), or as valid representations of social groups based on true aspects of intergroup relations (Leyens, Yzerbyt, & Schadron, 1994; Oakes, Haslam, & Turner, 1994). According to this view, which emphasizes the knowledge function of stereotypes, stereotyp*ing* is a necessary, and even normal, cognitive act that enables people to process information and organize knowledge via mental categories of people (Ashmore & Del Boca, 1981; Dovidio, Evans, & Tyler, 1986; Hamilton & Trolier, 1986; Sherman, Judd, & Park, 1989); also, most stereotypes are considered affectively neutral and not necessarily biased (Dovidio et al., 1996).

Since the 90s, however, emotional aspects of bias started gaining scholarly attention (Fiske, 1998); and the trend of normalizing stereotyping as a necessary mental activity or neutralizing the negative connotations and consequences of stereotypes came under fire by those who saw stereotypes as system-justifying, nefarious, and preserving the power and privilege of the dominant groups (Jost & Banaji, 1994). Others were critical of the increasing disconnect of the dominant cognitive approach to stereotypes from the ideological and contextual environments that generate and sustain these stereotypes (Augoustinos & Walker, 1998). In an effort to connect stereotypes to their sociostructural environment, Jost and Banaji (1994) outlined three justification functions of stereotypes. First, the ego-justification approach highlights how

individuals use stereotypes to justify their status and prejudicial attitudes and behaviors toward outgroup members (Adorno et al., 1950; Katz & Braly, 1935; Lippmann, 1922). The group-justification approach, on the other hand, describes how groups—the "extended self"—use stereotypes to promote collective interests and solidify ingroup identity; this framework helps understand why outgroup stereotypes are uniform and consensual among ingroup members and why disadvantaged groups would direct negative stereotypes at each other (Tajfel & Turner, 1979; Tajfel, 1981).

However, the two approaches do not explain the reason stereotypes are shared *across* groups despite varying intergroup relations and experiences; that is, men and women were found to share the same gender stereotypes, and Whites, Blacks, and Hispanics possessed the same ethnoracial stereotypes of one another (Jost & Banaji, 1994). Intrigued by how stigmatized groups, such as women compared to men and racial minorities compared to Whites, would internalize negative stereotypes about themselves, Jost and Banaji identified the system-justifying role of stereotypes. According to this approach, stereotypes work to preserve the status quo by justifying why some individuals and groups are more successful and deserving than others, legitimizing unequal social structures and fostering a sense of "false consciousness" among the disadvantaged (i.e., "false beliefs that sustain one's own oppression") (Cunningham, 1987, p. 255, as cited in Jost & Banaji, 1994).

Despite ample research on stereotyping, however, the link between stereotypes, affective bias, and discrimination is far from clear-cut (Dovidio et al., 1996). Allport (1954) argued that stereotyping did not predict prejudice or discrimination and therefore little would change by getting rid of stereotypes. However, some studies have found that emotional responses were a stronger predictor of discrimination and social distance, including the degree of contact, than cognitive beliefs (Dovidio et al., 1996; Stangor, Sullivan, & Ford, 1991). Others have shown that stereotypes are closely related to emotions (Fiske, Cuddy, & Glick, 2007).

For instance, according to the stereotype content model, stereotypes can be classified into four types along two dimensions, warmth and competence, and those belonging to the same type elicit similar emotions from people (Fiske, Cuddy, Glick, & Xu, 2002; Fiske, Cuddy, & Glick, 2007). The first kind of stereotypes is high on both warmth and competence and generate feelings of pride and admiration (e.g., ingroup members and close allies). Stereotypes high on warmth but low on competence elicit feelings of pity and sympathy (e.g., paternalistic attitudes

towards groups such as housewives, the disabled, or the elderly), while those low on warmth but high on competence produce envy and jealousy (e.g., successful outgroups such as Asians and Jews). The last kind, assigned to groups such as welfare recipients and drug addicts, is low on both warmth and competence and induces feelings of disgust, contempt, and resentment.

The work by Fiske et al. (2002) demonstrates that even seemingly positive and harmless stereotypes, such as the model minority, can lead to cold and envious feelings toward social outgroups. While affective bias has been compared alongside cognitive bias in predicting behavioral outcomes, few studies have empirically examined how cognitive bias is directly related to emotions (Weaver, 2008). Furthermore, despite the conceptual importance of intergroup feelings, studies have rarely measured them directly, presumably because intergroup feelings are assumed to manifest in other measures of intergroup attitudes such as social distance dispositions and policy attitudes and due to the difficulty in measurement (Jackman, 1994).

One of the earliest instruments that measured intergroup attitudes was the social distance scale, developed by Emory Bogardus in 1924 and first administered in 1926 (Wark & Galliher, 2007). At the time, scientific efforts to understand intergroup attitudes and prejudice were prompted by nativist movements and the passage of restrictive immigration laws in the late 1800s to early 1900s (e.g., 1882 Chinese Exclusion Act; 1924 National Origins Act), which banned immigration from Asia and set strict quotas for immigrants from Southern and Eastern European countries. The social distance scale asked individuals to what degree they would be willing to accept members of racial and ethnic outgroups, in descending order of closeness, as family members by marriage (closest), personal friends via social clubs, neighbors living on the same street, coworkers at employment, citizens, or non-citizen visitors to their country. People could also answer to exclude these outgroup members from their country (most distant).

Considered one of the oldest and most influential measurements of prejudice in social science research (Wark & Galliher, 2007), the social distance scale continues to be used today in studies on attitudes toward immigration policies and various racial and ethnic groups (Ayers et al., 2009; Ellison, Shin, & Leal, 2011; Lee et al., 2002; Weaver, 2008). Bogardus administered the scale every 10 years from 1926 to 1966 to trace patterns in American racial attitudes, and others continued the initiative until recently (Bogardus, 1928, 1947, 1959, 1967; Owen, Eisner, & McFaul, 1977; Parrillo & Donoghue, 2005, 2013).

Overall, Bogardus found that regardless of the level of education, income, region, occupation, or even race and ethnicity, most Americans showed a similar and consistent pattern of social distance to ethnoracial outgroups: Americans in general were most approving of English and Canadians, willing to accept them as citizens, neighbors, and family, while being most distant to Hindus, Blacks, and Turkish people. While racial and ethnic minorities would report feeling very close to and accepting of their ingroups, they showed a tendency to conform to the attitudes of the dominant group, rating other racial and ethnic minorities in the same order on the social distance scale as Whites (Allport, 1954; Bogardus, 1928, 1947). That is, Blacks would feel as distant to Jews, Asians, and Mexicans as would Whites.

Aiming to directly measure intergroup feelings, studies today ask respondents to rate their feelings toward outgroups as well as their own groups on thermometer scales, modeled after those used in the National Election Studies (NES); these measures ask individuals how "warm/cold" or "close/not close" they feel toward groups on a numerical range, which helps respondents avoid the difficulty of using words in expressing their exact feelings (Campbell, 1971; Gurin, Miller, & Gurin, 1980; Jackman, 1994; Miller et al., 1981, Weaver, 2008). Feelings of closeness toward outgroups are important because they have been found to be highly associated with the political support for those outgroups (Berelson et al., 1954, as cited in Craemer, 2008). However, feelings of closeness have seldom been studied in relation to outgroup identification in research on racial attitudes, as conventional practice was to use them as a complementing measure of ingroup membership and racial identity (i.e., how close individuals felt towards their *own* racial groups) (Craemer, 2008).

Gaps in Current Literature

Notwithstanding the breadth and depth of empirical knowledge on intergroup bias, there are several limitations to the current body of research. First, models on intergroup bias and attitudes are developed from observing Whites' attitudes toward Blacks. While recent efforts have tried to fill in the gap and update knowledge on Blacks' attitudes toward racial policies and their political preferences (Bobo et al., 2012; Bobo & Hutchings, 1996), there is a paucity of research on the attitudes and preferences of Asians (Weaver, 2012). Also, while there is conflicting and context-dependent evidence on outgroup attitudes, ranging from hostility, ambivalence, avoidance to negligence, most empirical work confirm that people tend to possess

ingroup favoritism. However, no work could be found that empirically examines the attitudes of individuals toward two or more outgroups. For instance, between Whites and Blacks, which outgroup would an Asian individual view more favorably? The likely answer is that it *depends*. But on what?

Research on intergroup bias observe that people form negative feelings, such as disgust and dislike, toward outgroups whom they have never met or rarely interacted on a daily basis. Such bias arises from distorted and overgeneralized images and beliefs about these outgroups. However, as mentioned above, few studies have empirically connected the dots among stereotypes, emotional bias, and discriminatory behaviors, and only recently studies have begun to examine stereotypes as system-legitimizing (Jost, Banaji, Nosek, et al., 2004) and in the context of sociostructural arrangements that create, activate, and sustain them (Crandall et al., 2011; Dovidio et al., 2012; Jost & Banaji, 1994).

Another major limitation in current literature is the lack of empirical work on affective and emotional bias and the definitional ambiguity of prejudice across various studies. On the one hand, prejudice is commonly referred to as the affective component of bias; but on the other, a more comprehensive definition is adopted, describing prejudice as an attitude which combines "affect (feelings), behavior tendency (inclination to act), and cognition (beliefs)" (Myers, 2012, p. 309). However, the latter definition adds to the problem of conceptual and operational ambiguity because it is unclear whether the aforementioned "affect," "behavior tendency," and "cognition" *are* prejudice or are the *sources* of prejudice. That is, should they be understood as the dimensions of prejudice, or as the determinants or sources of prejudice? Unfortunately, studies use inconsistent terminology and are often unclear about their conceptual stance on prejudice as an attitude.

In an insightful review, *A New Look at Our Old Attitude Problem*, Samra (2014) summarized the two different approaches to attitude research, the unidimensional multicomponent model and the multidimensional tripartite model of attitude structure, and illuminated the unfinished debate on how to best conceptualize and measure attitudes. Both the unidimensional and the multidimensional models identify three components of an attitude: the affective component refers to the feelings toward an attitudinal target; the cognitive component to the beliefs or stereotypes ascribed to the target; and the behavioral component to the past

behaviors or behavioral intentions toward the target (Huskinson & Haddock, 2006; Rosenberg & Hovland, 1960; Samra, 2014).

The main difference between the two approaches is how these three components relate to the attitude in question. Early research on attitude structure began with the multidimensional tripartite model which assumes that the contents of the three components "*are the attitudes*" (Rosenberg & Hovland, 1960; Samra, 2014, p. 133, emphasis in original). Smith (1947) was one of the first to conceptualize attitudes as multidimensional, identifying the cognitive, affective, and behavioral components. Rosenberg and Hovland (1960) then developed a formal tripartite model based on these three components, which are now commonly used in research.

Despite statistical support for the tripartite model, difficulties in establishing adequate procedures for attitude measurement have led scholars to adopt the unidimensional multicomponent model, which assumes attitudes have a single dimension (Breckler, 1984; Eagly & Chaiken, 1993; Ostrom, 1969; Triandis, 1967). Whereas the three components reflect the various aspects of an attitude in the tripartite model, the three components in the unidimensional model are considered the "ingredients" of an attitude, but not the attitude itself (Eagly & Chaiken, 1993; Samra, 2014). Thus, in the unidimensional model, the affective, cognitive, and behavioral responses are each evaluated on the same unidimensional scale of preference or favorability (e.g., strongly agree to strongly disagree; highly favorable to highly unfavorable) and then summed or averaged to derive a single evaluative scale of prejudicial attitudes (Samra, 2014).

While some argue that a consensus is emerging from the conceptual controversy surrounding attitudes (Zanna, 1990), others such as Samra (2014) are less optimistic, pointing out that attitude theorists have yet to formally agree on how many dimensions an attitude has (i.e., unidimensional or multidimensional). Despite the fact that emotions have been gaining more attention in research in recent decades (Fiske, 1998; Smith & Mackie, 2010), it is still unclear what we mean by prejudice as an attitude and how affect or emotions relate to prejudice. Studies continue to use unidimensional favorability scales to measure prejudicial attitudes; but instead of directly summing or averaging the cognitive and affective responses to derive a Likert-type attitude scale, some studies treat these cognitive and affective responses as *predictors* or *determinants* of prejudice.

For instance, a study by Abelson et al. (1982) found that affective responses outperformed cognitive trait assignments in predicting political preference. They used a 100-point thermometer scale to evaluate "extremely unfavorable (0)" to "extremely favorable (100)" attitudes toward presidential candidates; dichotomous affect items to measure the presence of certain positive (e.g., hopeful, proud) and negative (e.g., afraid, angry) feelings toward these candidates; and positive and negative cognitive trait items (e.g., honest, knowledgeable, selfish, weak) attributed to the candidates. While the authors asserted that the summary evaluation representing political preference was conceptually distinct from the affective responses, they did not statistically test this claim. Similarly, in demonstrating that affective responses can be more important in determining prejudicial attitudes toward social groups, Stangor, Sullivan, and Ford (1991) operationalized the cognitive determinant of prejudice as the stereotypical beliefs about groups (e.g., intelligent, lazy, religious, violent, greedy), the affective determinant as positive or negative feelings about the group (e.g., inspired, sympathetic, afraid, disgusted), and prejudice as the favorability or social distance toward groups. They also adopted the definition of prejudice as a negative attitude with "both affective and cognitive 'components' or 'sources'" (p.360).

The question, however, is whether the relationship between the affective and the overall evaluative responses, such as prejudice and preference, is tautological. While prior research has incorporated the cognitive, affective, and behavioral information in creating the unidimensional favorability scale, the aforementioned studies describe affective responses as a determinant of prejudice or preference—their findings are that positive (negative) feelings lead to more (less) favorable attitudes. Since tautology is when the hypothesized explanatory and dependent variables turn out to be measuring the same property (Hoy & Adams, 2016), studies need to be clearer about how they define and operationalize overall evaluative attitudes, such as prejudice, and how they relate to affect. Ostrom (1969) argued that there is a lack of statistical evidence proving that the scores on an evaluative scale along a "favorable-unfavorable" continuum measure a different construct from scores on an affective scale. Echoing Ostram's suspicion that the evaluative preference scores may just be measuring the affective component of the tripartite model, the present study questions whether the evaluation, "favorable/unfavorable," is a variation of the affect, "like/dislike."

Given the limitations in current research, the present study adopts the multidimensional model of attitude structure to define prejudice. Prejudice has at least three dimensions, the

cognitive (stereotypes), affective (feelings), and behavioral (discriminatory inclinations) components, and each of these dimensions represent different aspects of prejudice. It is assumed that these dimensions are conceptually distinct and thus are measured on different scales. Whereas some studies have confined prejudice to connote affective bias, this chapter uses prejudice as synonymous with overall negative bias, which has cognitive, affective, and behavioral dimensions.

However, I should be clear that developing and testing elaborate measures for a multidimensional approach to attitude research is beyond the scope of this dissertation. Rather, this chapter focuses on the conceptual link between the cognitive (racial stereotypes) and the affective (relative feelings of closeness toward racial outgroups) dimensions of prejudice given currently available, albeit imperfect, instruments. While prejudice consists of three components, each component is unidimensional. Therefore, on grounds of feasibility and practicality, this study relies on Likert-type, single-item scales to measure racial stereotypes and interracial closeness.

Following in the footsteps of Blumer (1958) and Jost and Banaji (1994), the current study examines racial stereotypes from a sociostructural standpoint, accounting for the differing racial group positions of Whites, Blacks, and Asians and how these stereotypes work to justify and preserve existing racial order. Stereotypes are more than the embodiments of individual biases, as one of their primary functions and reasons for existence is to justify and legitimize existing social order and power dynamics (Augoustinos & Walker, 1998). In introducing a third racial group to the conventional Black-White binary of race relations, the study employs Claire J. Kim's (1999) racial triangulation theory to examine how system-legitimizing myths are associated with the relative closeness individuals feel between two outgroups.

Theoretical Framework: Kim's Racial Triangulation

Prior to Kim's theory on racial triangulation, there were largely two research trends in explaining Asian American racial stratification: the "different trajectories" approach and the "racial hierarchy" approach (Kim, 1999). The former, also known as racial formation theory, highlighted the unique and independent racialization processes of different minority groups in the U.S., including Asian Americans (Omi & Winant, 1994); whereas the latter asserted the intermediate status of Asian Americans in the U.S. racial hierarchy. Influenced by Blumer's

group position theory, Kim argued that the different-trajectories approach failed to account for the fact that each group is racialized *relative to* the other groups and that the racialization trajectories of diverse groups are interrelated. On the other hand, the racial-hierarchy approach used a simplistic, unidimensional scale to place Asian Americans somewhere in the middle between Whites and Blacks.

Given these shortcomings, she proposed an alternative model that accounts for both the relative and multidimensional nature of Asian American racial stratification, which she called the racial triangulation of Asian Americans. In racial triangulation, there are two dimensions that explain the racial positioning of Asian Americans vis-à-vis Whites and Blacks. The first dimension is represented by the *superior-inferior axis*: Asians are "relatively valorized" as the model minorities who have overcome structural inequality via hard work ethics and strong family values. The superior-inferior axis places Asians between Whites and Blacks. The *outsider-insider axis*, on the other hand, portrays Asians as perpetual foreigners and ostracizes them from civic and political participation. This dimension places Asians on the opposite end (outsider) of Whites and Blacks (insiders). As such, Asians have been "racially triangulated" in relation to Whites and Blacks since the beginning of mass migration from Asia in the mid-1800s. The only difference is that pre-1965 the manifestation was overt; whereas post-1965 the racial hierarchical structure became less visible to the public eye due to the norms of colorblindness.

Consistent with the arguments of group position theory, Kim maintained that racial triangulation worked to preserve White privilege and dominance. The superior-inferior axis corresponds to Blumer's domination-oppression dimension while the outsider-insider axis corresponds to his exclusion-inclusion dimension[8]. Racially triangulated, Asians are neither White (dominant racial status) nor Black (insider/full American); they are placed in between Whites and Blacks on the superior-inferior axis and on the other end of the outsider-insider axis opposite Whites and Blacks. While Whites may hold positive views of Asian Americans on hard work, achievement, and social mobility (captured by the model minority stereotype), they are more likely to perceive Asians as "different" and "unassimilable" due to other aspects, such as phenotype, language, food, and Confucian values (consistent with the perpetual foreigner

[8] Blumer conceptualized these dimensions by identifying the feelings of superiority and exclusivity in race prejudice. However, it was Bobo (1999) who named these dimensions "domination-oppression" and "exclusion-inclusion."

stereotype). The current study draws from this unique and insightful perspective on the U.S. racial hierarchy to help explain interracial closeness and psychological distancing among racial groups.

CONCEPTUAL MODEL(S) AND HYPOTHESES

As shown in Figure 2.1, there are three models by race for the current study: One for Whites; another for Asians, and the third for Blacks. Each examines whether Kim's (1999) two dimensions of racial triangulation add to our understanding of interracial closeness. The superior-inferior dimension is proxied by the hardworking stereotypes of Asians relative to Blacks; whereas the insider-outsider dimension is proxied by whether one needs to be born in the U.S. to be considered a "true American." It should be noted that both the outcome variable, perceived relative closeness between two outgroups, and the explanatory variable, hardworking stereotypes of Asians vis-à-vis Blacks, are in comparative/relative terms.

Figure 2.1 Conceptual Model of Racial Triangulation and Interracial Closeness

$$y = \beta_0 + \sum_i \beta_{1,i} Racial\ \ Triangulation_i + \sum_i \beta_{2,i}\ \ Outgroup\ \ Threat_i + \sum_i \beta_{3,i}\ \ Racial\ \ ID_i + \sum_i \beta_{4,i}\ \ Friend\ \ Ethnic\ \ Mix_i + \sum_i \beta_{5,i}\ \ Neighborhood\ \ Ethnic\ \ Mix_i + \sum_i \beta_{6,i} Symbolic\ \ Racism_i + \sum_i \beta_{7,i} Principle\ \ Values_i + \sum_i \beta_{8,i}\ \ Controls_i + u$$

y: *Whites' perceived closeness to Asians vis-à-vis Blacks* (White Model)
Asians' perceived closeness to Whites vis-à-vis Blacks (Asian Model)
Blacks' perceived closeness to Asians vis-à-vis Whites (Black Model)

The model for Whites explores whether these two dimensions are associated with Whites' relative feelings of closeness to Asians versus Blacks. Since the superior-inferior dimension places Asians above Blacks according to the racial triangulation theory, I hypothesize that the more Whites approve the stereotype that Asians work harder than Blacks, the closer they feel toward Asians than to Blacks. On the other hand, Whites who endorse the view that one needs to be born in the U.S. to qualify as a "true American" are expected to feel closer to Blacks than to Asians.

The Asian and Black models are similar in structure to the White model. The Asian model explores whether Asians internalize the racial stereotypes that portray them as the hardworking model minorities and perpetual foreigners and if the internalizations predict their perceptions of closeness to Whites vis-à-vis Blacks. Since the model minority stereotype positions Asians above Blacks, Asians who internalize the valorization are expected to identify more with Whites (those in power) than Blacks and make effort to maintain their relative position of power and privilege. On the other hand, Asians who internalize the perpetual foreigner image will feel socio-politically marginalized and identify more with Blacks. Blacks, on the other hand, will identify more with Whites than Asians the more they endorse the model minority and perpetual foreigner images of Asians, as racial triangulation divides and creates distances between minority groups. Not only does the model minority stereotype help deny structural inequalities and justify entrenched, systematic biases against Blacks and other minorities, but it also redirects Black resentment to Asians instead of to mainstream Whites (e.g., The 1992 L.A. Riots).

Additionally, the model specifications include variables that provide alternative explanations for outgroup closeness. The selection of these variables are based on existing research. First, according to the theories on realistic group conflict and group position, people can feel threatened by outgroups in competitions for jobs and sociopolitical influence. Hence, the models account for group competition and threat. Next, based on social identity theory, the models include variables on in-group identification to see whether feeling close to one's own racial group is associated with how close one feels toward the two racial outgroups. Also, given insights from the contact hypothesis, the models control for the ethnic mix of friends and neighborhoods to see if contact with different racial and ethnic groups influence people's perceptions of relative closeness between two outgroups.

The last two alternative explanations for outgroup closeness are based on the theories of symbolic racism and principle values, which were originally developed to explain Whites' attitudes toward Blacks and racial policies such as affirmative action. The current study examines whether Whites' racial resentment toward Blacks is associated with their relative closeness to Asians vis-à-vis Blacks; whether Asians mimic Whites' racial resentment toward Blacks and identify more with Whites; and if Blacks' opposition to symbolic racism predicts a more distant stance to Whites relative to Asians. The model also accounts for the potential

association of principle American values, such as equality and individualism, with people's perceptions of outgroup closeness, since hardworking values are tied to equal opportunity, fair competition, and self-reliance.

Lastly, models for all three racial groups include sociodemographic controls such as education, income, age, and gender. The Asian model also includes foreign-born status as over 75 percent of Asians in the analytic sample were born outside of the U.S., while only six percent of Whites and three percent of Blacks were foreign-born.

METHODS

Sample

The current study used the National Politics Study (NPS, 2004)[9] for its cross-sectional analysis of interracial closeness. The NPS was chosen primarily for its sizable sample of Asian Americans, which allows for meaningful cross-racial comparisons of the study variables. The NPS collected data via telephone surveys on a total sample of 3,339 respondents, of which 919 were non-Hispanic White; 756 African American; 404 Caribbean Black; 757 Hispanic; and 503 Asian. Sponsored by the National Science Foundation, the University of Michigan, and the Carnegie Corporation, its primary goal was to gather information on people's political attitudes, beliefs, behaviors, and expectations; it includes items on racial stereotypes, prejudice, identity, interaction, and policy attitudes.

Measures

Dependent Variables

An individual's perceived closeness between two racial outgroups was the outcome variable for the study. The original NPS item asks, "How close do you feel to each of the following groups of people (Whites, African Americans, Asian Americans, Hispanics, and Caribbeans) in your ideas, interests, and feelings about things?" The response options were reverse coded so that "very close=4; fairly close=3; not too close=2; and not close at all=1." To create a relative psychological distance scale, an individual's closeness rating of one racial

[9] Jackson, James S., Vincent L. Hutchings, Ronald Brown, and Cara Wong. National Politics Study, 2004. ICPSR24483-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-03-23. http://doi.org/10.3886/ICPSR24483.v1

outgroup was subtracted from that of another racial outgroup. Hence, the constructed dependent variables range from -3 to 3, with positive values indicating individuals felt closer to the first outgroup compared to the second and negative values indicating individuals felt closer to the second outgroup compared to the first. Therefore, for the White model, the dependent variable was "closeness to Asians vis-à-vis Blacks," where positive values meant Whites felt closer to Asians and negative values meant Whites felt closer to Blacks. Similarly, the dependent variables were "closeness to Whites vis-à-vis Blacks" for the Asian model and "closeness to Asians vis-à-vis Whites" for the Black model.

Independent Variables

Superior-Inferior Dimension (Model Minority Stereotype). According to Kim's (1999) racial triangulation theory, there are two dimensions along which racial groups are stratified: the superior-inferior and the insider-outsider dimensions. The superior-inferior axis is represented by the model minority stereotype which elevates the position of Asians relative to Blacks. Existing instruments operationalize the model minority stereotype using items that portray Asians as the hardworking minority who pull themselves up by their bootstraps[10] (Yoo, Burrola, & Steger, 2010). Hence, the current study used the following NPS item: "On a 7-point scale (1=Lazy; 4=Neither End; 7=Hardworking), where would you rate a) Whites; b) African Americans; c) Hispanics; d) Asian Americans; and e) Caribbeans in general?" Since the stereotype compares Asians to other minority groups, the hardworking scores of Blacks were subtracted from the hardworking scores of Asians; the constructed variable ranges from -6 to 6, with positive values indicating that people believed Asians were more hardworking than Blacks and negative values indicating that people believed Blacks were more hardworking than Asians.

Insider-Outsider Dimension (Perpetual Foreigner Stereotype). The insider-outsider dimension is connected to the perpetual foreigner image of Asian Americans. Because the NPS does not have measures for the foreigner image of Asians, the current study utilized the best available item, which asked whether individuals on average thought native-born status was an

[10] Conceptually, the model minority stereotype should also be operationalized using items on people's perceptions about Asians' versus Blacks' intelligence. There is an underlying assumption that Asians are smarter while Blacks are less intelligent than other racial groups. However, the NPS does not contain items on the intelligence of different racial groups as does the American National Election Studies.

important pre-requisite for being "truly American." The response options were reverse coded so that "not important at all=1; not very important=2; fairly important=3; and very important=4." The item is relevant for the foreigner image of Asians since two-thirds of the population are foreign-born.

Realistic Group Conflict. Each model had two scales measuring realistic group conflict. In the White model, the scales measured threat from Asians and threat from Blacks; in the Asian model, threat from Whites and threat from Blacks; and in the Black model, threat from Asians and threat from Whites. Each scale was constructed by averaging the scores on the two items that asked people whether they perceived a particular racial group as competition for jobs and for political influence. For instance, the items used in the Asian threat scale were "more good jobs for Asians means fewer good jobs for people like me" and "the more influence Asians have in politics, the less influence people like me will have in politics." The response options for each item were reverse coded so that "strongly disagree=1; somewhat disagree=2; somewhat agree=3; and strongly agree=4." The scale was then created using the average values of the two items so that higher scores on the scale indicated people perceived Asians as a greater threat and competition for jobs and political influence. The White threat and Black threat scales were constructed in the same manner. The Cronbach's coefficient alphas were 0.68 for the Asian threat scale; 0.57 for the White threat scale; and 0.65 for the Black threat scale.

Racial Identity. Two variables were included in the model for racial identity. The first variable measured how close individuals felt toward people of their own race. The response options were reverse coded so that "very close=4; fairly close=3; not too close=2; and not close at all=1." The next variable was "linked fate" or racial group consciousness, which was measured by asking people whether they thought "what happens generally to people [of their own race] in this country will have something to do with what happens in [their own] lives." The response options were "yes=1 and no=0."

Interracial Contact. For cross-racial contact, two types of variables were used: the racial and ethnic mix of friends and neighborhoods. Each variable was divided into five dummy variables—mostly White friends or neighborhood; mostly Black friends or neighborhood; mostly Hispanic friends or neighborhood; mostly Asian friends or neighborhood; and lastly, ethnically-mixed group of friends or neighborhood. For each model, the reference category was the respondent's own racial group (e.g., mostly White for the White model).

Symbolic Racism. Based on the Symbolic Racism Scale of 2000 (Henry & Sears, 2002), three items were combined into a scale by averaging the scores across the items[11]. The first item asked whether "over the past few years, Blacks have gotten less than they deserve." The response options were "strongly disagree=4; somewhat disagree=3; somewhat agree=2; and strongly agree=1," where higher values meant more racial resentment toward Blacks. The second item asked how much people agreed with the statement, "Irish, Italians, Jewish, and many other minorities overcame prejudice and worked their way up; Blacks should do the same without any special favors." The response options for this item were reverse coded so that "strongly disagree=1; somewhat disagree=2; somewhat agree=3; and strongly agree=4." Again, higher values indicated more prejudice toward Blacks. The last item asked "how much discrimination or unfair treatment [the respondent] thought Blacks faced in the U.S." The response options were "a lot=1; some=2; a little=3; and none=4," where higher values indicated stronger denial of racism against Blacks.

Principle Values. Four variables were included in the models to account for American conservatism and principle values, such as economic individualism and equality. Political ideology was measured on a five-point Likert-type scale, where "extremely liberal=5; slightly liberal=4; moderate=3; slightly conservative=2; and extremely conservative=1[12]." For economic individualism, the following items were chosen based on Feldman's (1988) core beliefs and values scales: "If racial and ethnic minorities don't do well in life, they have no one to blame but themselves"; and "America is a land of opportunity in which you only need to work hard to succeed."[13] Both items were reverse coded so that higher scores on the four-point Likert-type scale meant stronger beliefs in the core American values of economic individualism. Beliefs in equality of opportunity were operationalized using the item, "It is not really that big of a problem if some people have more of a chance in life than others." Higher values on this four-point scale meant people held more unegalitarian views. Thus, lower scores meant stronger support for equality of opportunity.

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[11] α=0.62 when respondents were White; α=0.53 when Asian; and α=0.40 when Black.

[12] Those who answered "don't know" or "haven't thought about it" were collapsed with the "moderates." Those who refused to answer were treated as missing.

[13] These choices were based on similar items in Feldman's (1988) economic individualism scale: "Most people who don't get ahead should not blame the system; they really have only themselves to blame"; and "Any person who is willing to work hard has a good chance of succeeding" (p.421).

Control Variables

Sociodemographic controls, such as education, income, age, gender, and foreign-born status, were included in the models. There are five ordinal categories for education: 1=less than high school; 2=graduated high school; 3=some post-high school education and training; 4=graduated 4-year college; and 5=post-graduate education and training. Income is a continuous variable that was log transformed due to the highly skewed distribution of data (skewness of 14.41). Age is in years, which ranges from 17 to 100 years with a mean age of 45 years. For gender, male equals one and female equals zero. Foreign-born status is also a dummy variable, where people born outside of the U.S. equal one (approximately 32% of the sample) and those born in the U.S. equal zero.

Analysis Plan

Descriptive statistics were analyzed to see which outgroup individuals on average felt closer to and whether the hardworking and foreigner stereotypes of Asians were held across all three racial groups. Other background characteristics of the study sample were also examined. For the main analyses, regressions with robust standard errors were separately run (*regress, robust* command) for the White, Asian, and Black models. The dependent variable, feelings of relative closeness between two outgroups, was treated as a continuous variable given its range of -3 to 3 and it was assumed that the true latent variable of closeness was continuous and normally distributed[14].

Robust standard errors were estimated because preliminary diagnostics after Ordinary Least Squares (OLS) regressions revealed that the error terms did not have constant variance and that the OLS assumption for homoscedasticity was violated. Specifically, visual inspection of the error variance using the *rvfplot* command and the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity (*estat hettest* command) were conducted. Since most of the study variables are Likert-type scales measuring people's attitudes and beliefs, the responses tend to skew toward either extreme (e.g., strongly agree or strongly disagree), causing the variance of the error terms to change with the values of the predictors (Williams, 2015). Also, since the NPS oversampled minority groups, the OLS assumption of independent and identically distributed error terms was

[14] Running the models with ordinal logistic regression produced similar results with respect to the direction and statistical significance of the regression coefficients.

likely violated.

While OLS can still produce unbiased and consistent parameter estimates in the presence of heteroscedasticity, they are no longer efficient; and since the estimated standard errors are inconsistent, the test statistics and confidence intervals are also biased (Parker, 2011; Williams, 2015). Thus, Tables 2.2 and 2.3 in the next section display the regression results with robust standard errors obtained with the Huber-White sandwich estimators.

For the current study, a complete-case analysis was conducted and missing data were not imputed as the proportion of missingness was not high for most of the study variables. For the main dependent and independent variables, missingness ranged from 0.93% (outsider-insider dimension) to 7% (superior-inferior dimension and closeness to Asians vis-à-vis Whites). The missingness of the other variables mostly ranged between zero and three percent. Two variables, Black and White threat, had the highest percentage of missing data—24% and 28%, respectively. Since missing data can cause bias and inefficiency in the parameter estimates if the assumption of "missing completely at random" (MCAR) is violated, a series of logit models were run to test if a given variable's missingness could be predicted by the other variables in the model. Results showed that missingness on the threat variables across the three racial groups could be predicted by one or more of the other variables in the model. However, there was no evidence that missingness on the other variables, including the main dependent and racial triangulation variables, could be predicted by the other variables in the model. Thus, I decided to proceed with a complete-case analysis.

RESULTS

Descriptive Statistics

Table 2.1 shows the unweighted summary statistics of the study variables by racial groups—Whites, Asians, and Blacks. Additionally, Figures 2.2 to 2.5 graphically represent the main outcome and explanatory variables—that is, the relative closeness to outgroups and the model minority and perpetual foreigner stereotypes of Asians.

Table 2.1 Descriptive Statistics of Whites, Asians, and Blacks in the NPS (2004; Unweighted)

Variables	Range	Means & Standard Deviations		
		Whites (*n*=675)	Asians (*n*=386)	Blacks (*n*=607)
Relative Closeness to Outgroups				
Asians vis-à-vis Blacks	-3 to 3	-0.27***(0.85)	---	---
Whites vis-à-vis Blacks	-3 to 3	---	0.46***(0.86)	---
Asians vis-à-vis Whites	-3 to 3	---	---	-0.28***(0.97)
Racial Triangulation				
Hardworking	-6 to 6	1.07***(1.39)	2.01***(1.55)	0.47***(1.65)
Foreigner	1-4	2.59 (1.10)	2.19 (1.03)	3.33 (1.00)
Realistic Group Conflict				
White Threat	1-4	---	2.43 (0.73)	2.64 (0.95)
Asian Threat	1-4	1.59 (0.75)	---	2.20 (0.90)
Black Threat	1-4	1.56 (0.71)	2.05 (0.67)	---
Racial ID				
Ingroup Closeness	1-4	3.34 (0.62)	3.25 (0.71)	3.41 (0.71)
Linked Fate	0-1	0.64 (0.48)	0.70 (0.46)	0.71 (0.46)
Friend Ethnic Mix				
Mostly White	0-1	0.60 (0.49)	0.13 (0.34)	0.03 (0.18)
Mostly Black	0-1	0.01 (0.10)	0.01 (0.09)	0.54 (0.50)
Mostly Hispanic	0-1	0.02 (0.13)	0.01 (0.11)	0.01 (0.10)
Mostly Asian	0-1	0.01 (0.08)	0.38 (0.48)	0.003 (0.06)
Mixed	0-1	0.36 (0.48)	0.47 (0.50)	0.42 (0.49)
Neighborhood Ethnic Mix				
Mostly White	0-1	0.51 (0.50)	0.62 (0.48)	0.07 (0.25)
Mostly Black	0-1	0.12 (0.32)	0.02 (0.13)	0.65 (0.48)
Mostly Hispanic	0-1	0.08 (0.28)	0.06 (0.24)	0.12 (0.33)
Mostly Asian	0-1	0.04 (0.19)	0.07 (0.25)	0.01 (0.09)
Mixed	0-1	0.25 (0.43)	0.24 (0.42)	0.15 (0.36)
Symbolic Racism	1-4	2.54 (0.73)	2.43 (0.65)	2.05 (0.68)
Principle Values				
Political Ideology	1-5	2.92 (1.36)	3.13 (1.17)	3.16 (1.26)
Individualism				
No One to Blame	1-4	2.74 (1.01)	2.66 (1.00)	2.76 (1.09)
Land of Opportunity	1-4	3.26 (0.87)	3.29 (0.86)	3.15 (0.99)
(In)equality	1-4	2.28 (1.01)	2.56 (1.02)	2.25 (1.13)
Sociodemographic Controls				
Education	1-5	3.36 (1.15)	4.12 (0.97)	2.89 (1.16)
Income (a)	0-8000	50.0 (418.7)	70.0 (490.8)	40.0 (284.7)
Age	17-100	50.25 (16.54)	39.81 (13.53)	45.05 (15.55)
Gender (Male=1)	0-1	0.43 (0.49)	0.61 (0.49)	0.38 (0.49)
Foreign Born	0-1	0.06 (0.24)	0.73 (0.44)	0.03 (0.17)

Note: standard deviations in parentheses; †p<0.10; * p<0.05; ** p<0.01; *** p<0.001 (significance tests of whether the estimates were different from zero).

(a) median instead of mean; unit is in thousands.

First, Whites and Blacks on average felt closer to each other than to Asians ($p<0.001$); while Asians reported feeling closer to Whites than to Blacks ($p<0.001$) (see also Figure 2.2). All three groups, including Blacks, rated Asians as more hardworking than Blacks ($p<0.001$) although the difference in ratings was greatest for Asians and smallest for Blacks.

Figure 2.3 shows the absolute scores on the hardworking scale that ranges from 1 to 7, where 7 indicates hardworking; 4, neither; and 1, lazy. Whites on average perceived Asians as more hardworking than their own group (i.e., 5.7 points vs. 5.2 points), while rating Blacks the lowest on the scale (i.e., 4.6 points). Blacks, too, rated Asians as the most hardworking group of the three but perceived Whites and Blacks as equally hardworking. Asians, on the other hand, mimicked the rating patterns of Whites but were more generous in their evaluations of Asians and harsher in their ratings of Blacks.

Figure 2.2 Relative Closeness to Outgroups (Outcome Variable)

Figure 2.3 Absolute Hardworking Scale by Racial Group

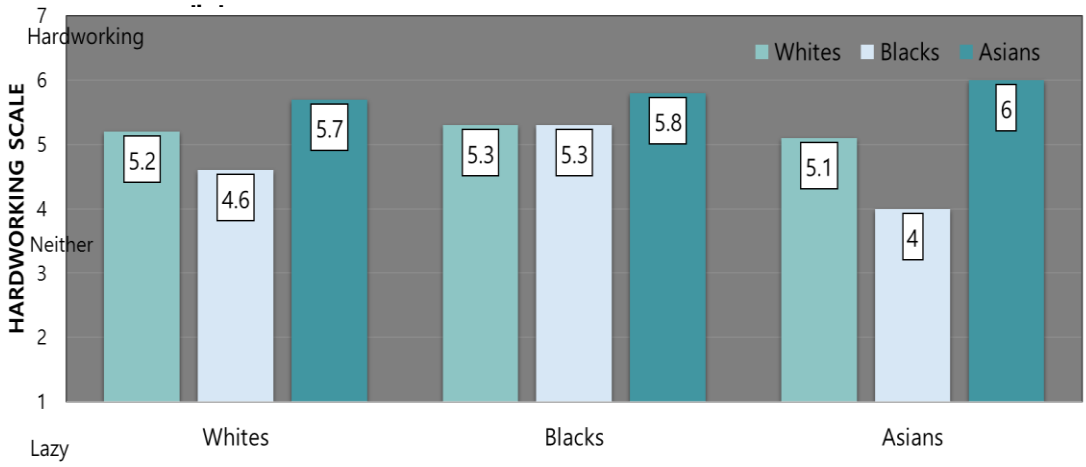


Figure 2.4 now displays the differences in the hardworking scores of Asians and Blacks across the three racial groups. The figure shows that the full range of values for Whites is -3 to 6, meaning Whites can rate Asians as more hardworking than Blacks by up to six points and Blacks as more hardworking than Asians by up to three points. The range is even more limited for Asians. While some Asians rated Blacks as more hardworking than their own group, the score difference was only one point in favor of Blacks. In contrast, Asians can rate their own group as more hardworking than Blacks by up to six points. Lastly, evaluations by Blacks range from -6 to 6, consisting of all possible combinations of ratings.

Figure 2.4 Relative Hardworking Scale by Racial Group (Main Explanatory)

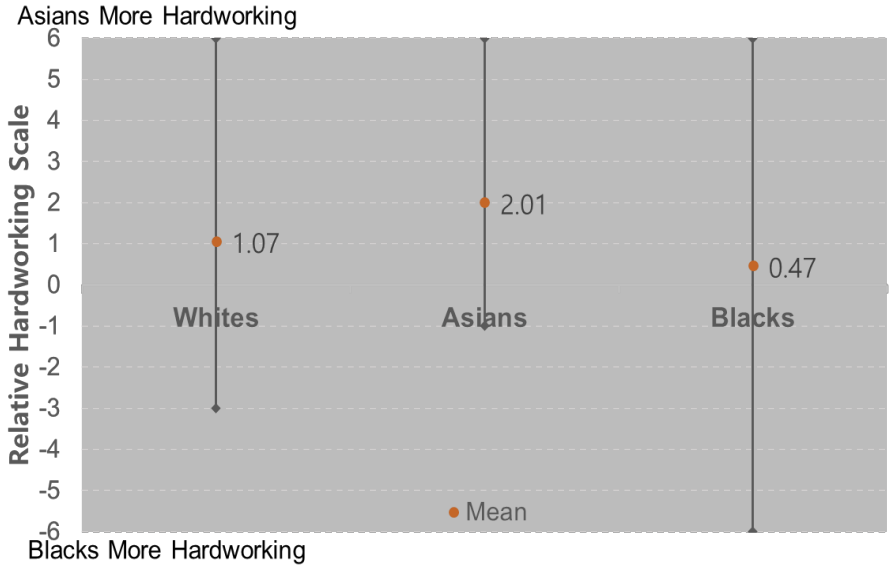
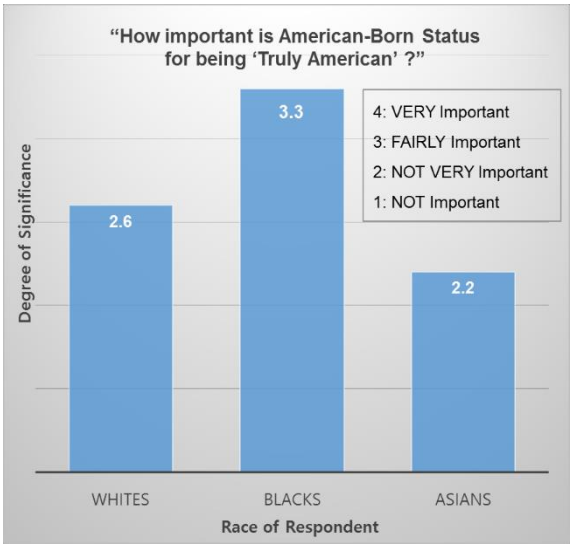


Figure 2.5 U.S.-Born Status & "Truly American" (Main Explanatory)



As shown in Table 2.1 and Figure 2.5, Whites were neutral towards the idea that in order to be considered "truly American" people had to be born in the U.S. (i.e., they answered between "not very important" and "fairly important"); Asians thought it was "not very important" while Blacks reported it was "fairly important."

Whites generally did not perceive Asians or Blacks as a threat; but Blacks leaned slightly towards "somewhat agree[ing]" that Whites were a threat, while neither Blacks nor Asians perceived each other as a threat. Asians were neutral to White threat, answering between "somewhat disagree" and "somewhat agree." With respect to symbolic racism, Whites and Asians on average were in the middle towards items on Black resentment, but Blacks "somewhat disagreed" on them. All three groups on average reported being politically moderate; and while Whites and Blacks did not support the idea of unequal opportunities, Asians were neutral towards it. All three groups generally showed support for the values of economic individualism.

Approximately 64 percent of Whites, 70 percent of Asians, and 71 percent of Blacks reported a sense of linked fate with their own racial group—that is, they perceived that what happened to people of their own race would also affect what happened in their lives. Whites and Asians on average felt "fairly close" while Blacks felt between "fairly close" and "very close" to their own racial group.

Whites and Blacks generally had contact with people of their own race: three-fifths of Whites had "mostly White" friends and over half lived in "mostly White" neighborhoods; similarly, 54 percent of Blacks had "mostly Black" friends and 65 percent lived in "mostly Black" neighborhoods. On the other hand, close to half of Asians had an ethnically diverse mix of friends (47%), followed by those who had "mostly Asian" (38%) friends. Also, compared to Blacks, a greater proportion of Asians had "mostly White" friends (i.e., 3% vs 13%). Residentially, Asians preferred to live in predominantly White neighborhoods (62%) over minority-majority areas, including "mostly Asian" neighborhoods (7%). Still, with respect to integration, over a third of Whites and 42% of Blacks had friends with diverse ethnic backgrounds. Also, a quarter of Whites and Asians, respectively, and 15% of Blacks lived in ethnically-mixed neighborhoods.

As for sociodemographic characteristics, Asians on average had the highest level of education, followed by Whites and Blacks, and had the highest median income of $70,000 per year, earning 75% more than Blacks and 40% more than Whites. The average age of Whites in

the sample was 50 years; Blacks, 45 years; and Asians, 40 years. Over 60 percent of Asians, 43 percent of Whites, and 38 percent of Blacks in the sample were males. As for nativity, 73 percent of Asians were foreign-born while only six percent of Whites and three percent of Blacks were born outside of the U.S.

Regressions with Robust Standard Errors

White Model. Table 2.2 displays the results for the White model and Table 2.3 combines the results from the Asian and Black models. For Whites, the results show that racial triangulation does help explain Whites' perceived closeness to Asians *vis-à-vis* Blacks, even after controlling for realistic group threat, racial identity, ethnic mix of friends and neighborhoods, racial resentment toward Blacks, political ideology, support for principle values, and other sociodemographic characteristics. Specifically, there was a significant positive association between Whites' endorsement of the view that Asians work harder than Blacks and their relative affinity towards Asians vis-à-vis Blacks on the closeness scale, *ceteris paribus* ($p<0.001$). On the other hand, Whites who perceived being born in the U.S. was an important pre-requisite for being considered "truly American" showed a tendency to feel relatively closer to Blacks vis-à-vis Asians on the closeness continuum, all else being equal, than Whites who did not think U.S.-born status was as important for being a "true American."

With respect to the theories on realistic group conflict and group position, only the threat from Asians was consistently associated with Whites moving closer to Blacks and away from Asians ($p<0.05$). Neither the threat from Blacks nor Whites' racial identity were associated with Whites' feelings of relative closeness toward Asians *vis-à-vis* Blacks.

Table 2.2 White Model: Racial Triangulation & Perceived Closeness to Asians vis-à-vis Blacks

DV: Closeness to Asians vis-à-vis Blacks	(1)	(2)	(3)	(4)	(5)
Independent Vars:					
Realistic Group Conflict					
Asian Threat	-0.17† (.09)	**-0.20*(.09)**	**-0.20*(.09)**	**-0.20*(.09)**	**-0.19*(.09)**
Black Threat	0.12 (.10)	0.12 (.10)	0.12 (.10)	0.10 (.10)	0.10 (.09)
Racial ID					
Ingroup Closeness		-0.06 (.05)	-0.06 (.05)	-0.05 (.05)	-0.07 (.05)
Linked Fate		0.03 (.07)	0.03 (.07)	0.03 (.07)	0.03 (.07)
Friend Ethnic Mix (Reference: Mostly White)					
Mostly Black		**-1.26*(.50)**	**-1.23*(.49)**	**-1.21*(.50)**	**-1.15**(.44)**
Mostly Hispanic		**-0.68*(.30)**	**-0.67*(.30)**	**-0.74*(.33)**	**-0.65*(.33)**
Mostly Asian		0.35 (.38)	0.37 (.40)	0.12 (.42)	0.14 (.42)
Mixed		**-0.14*(.07)**	**-0.14*(.07)**	**-0.15*(.07)**	**-0.14*(.07)**
Neighborhood Ethnic Mix (Reference: Mostly White)					
Mostly Black		-0.10 (.11)	-0.09 (.11)	-0.07 (.11)	-0.05 (.11)
Mostly Hispanic		0.04 (.12)	0.05 (.12)	0.09 (.12)	0.07 (.12)
Mostly Asian		0.05 (.15)	0.06 (.15)	0.10 (.15)	0.05 (.16)
Mixed		0.08 (.07)	0.08 (.07)	0.09 (.07)	0.09 (.07)
Symbolic Racism			0.04 (.05)	0.03 (.07)	0.005 (.07)
Principle Values					
Political Ideology				-0.04 (.03)	-0.04 (.03)
Individualism					
No One to Blame				0.01 (.04)	0.01 (.04)
Land of Opportunity				-0.01 (.04)	0.01 (.04)
(In)equality				-0.03 (.03)	-0.02 (.03)
Racial Triangulation					
Superior-Inferior (Model Minority)					**0.09***(.02)**
Outsider-Insider (Perpetual Foreigner)					**-0.13***(.03)**
Sociodemographic Controls					
Education	**0.09**(.03)**	**0.07*(.03)**	**0.08*(.03)**	**0.09**(.03)**	0.05(.04)
Log Income	0.03 (.03)	0.03 (.03)	0.03 (.03)	0.02 (.04)	0.004 (.04)
Age	0.000 (.002)	-0.001(.002)	-0.001 (.002)	-0.001 (.002)	0.000(.002)
Gender (Male=1)	**0.20***(.06)**	**0.23***(.06)**	**0.22***(.06)**	**0.21***(.06)**	**0.18**(.06)**
Constant	**-0.95*(.38)**	-0.55(.43)	-0.66(.45)	-0.39 (.50)	0.17 (.51)
Observations	*N*=798	*N*=723	*N*=723	*N*=707	*N*=675
R-Squared	0.05	0.09	0.09	0.10	0.15

Note: Estimated using Ordinary Least Squares (OLS) Regressions; standard errors in parentheses.
†p<0.10; * p<0.05; ** p<0.01; *** p<0.001

Consistent with prior knowledge, Whites with "mostly Black" friends moved 1.15 points closer to Blacks vis-à-vis Asians compared to Whites who had "mostly White" friends, *ceteris paribus*. Interestingly, Whites who had "mostly Asian" friends did not feel any closer to Asians vis-à-vis Blacks than Whites with "mostly White" friends. However, since the dependent variable is a difference score, I examined the absolute closeness scores, which range from 1 ("not too close") to 4 ("very close"), and found that on average Whites with "mostly Asian" friends reported feeling close to both Asians (3.6 points) *and* Blacks (3.4 points), while Whites with "mostly White" friends did not feel close to either group (2.4 points for Asians and 2.6 for Blacks).[15] As such, while the score differences may appear to be similar between Whites with "mostly Asian" friends and those with "mostly White" friends, the substantive meaning behind the score differences is notably distinct. Whites who had "mostly Hispanic" or an ethnically-mixed group of friends were drawn closer to Blacks than to Asians compared to those with "mostly White" friends, all else being equal. Living in neighborhoods with other racial and ethnic groups, however, did not impact Whites' relative affinity toward one outgroup over another.

Neither racial resentment towards Blacks nor American conservatism and support for principle values were associated with Whites' relative closeness to Asians vis-à-vis Blacks, holding all else constant. However, this did not mean symbolic racism was irrelevant to interracial affinity. Running additional analyses, the study replaced the relative closeness scale with closeness scales each for Asians and Blacks and found that racial resentment towards Blacks was negatively associated with closeness to Blacks as well as with closeness to Asians, even after controlling for perceived threat, contact, racial identity, principle values, and racial triangulation. That is, symbolic racism dampens Whites' affinity towards outgroups but cannot distinguish which outgroup Whites feel closer between Blacks and Asians.

While income and age did not predict Whites' feelings of relative closeness to Asians vis-à-vis Blacks, White men moved 0.18 points closer to Asians than White women on the Asian-Black continuum of closeness in the last specification, *ceteris paribus* ($p<0.01$). The first four specifications show a positive association between education and Whites' perceived closeness to Asians compared to Blacks but the significance of education disappears once the

[15] Supplementary analyses are not presented in this chapter but can be provided upon request.

model minority and foreigner stereotypes are included in the model. Adding the racial triangulation predictors to the model increases the R-squared from 0.10 to 0.15, indicating that 15 percent of the variability in Whites' relative closeness scale is explained by the last specification.

Asian Model. As shown in Table 2.3, the model minority stereotype (superior-inferior dimension) predicts Asians' relative closeness to Whites vis-à-vis Blacks; that is, Asians who internalized the stereotype showed a tendency to feel relatively closer to Whites vis-à-vis Blacks on the closeness continuum, holding all else constant, than Asians who did not internalize the stereotype ($p<0.001$). Also, while the association was only marginally significant ($p<0.10$), those who internalized the foreigner stereotype felt relatively closer to Blacks vis-à-vis Whites—a unit increase on the outsider-insider scale moved Asians 0.08 points closer to Blacks compared to Whites. Overall, the findings for Asians support the racial triangulation hypotheses laid out in the previous section.

None of the alternative explanations except for symbolic racism and contact through friends proved to be statistically significant. The more Asians shared the sentiments of Whites' racial resentment toward Blacks, the closer they moved towards Whites as opposed to Blacks, *ceteris paribus* ($p<0.05$). Rather surprisingly, Asians who had "mostly Black" friends moved almost a point closer to Whites vis-à-vis Blacks compared to those who had "mostly Asian" friends ($p<0.001$). Similarly, while the association was not statistically significant, Asians who had "mostly Hispanic" friends moved almost half a point closer to Whites as opposed to Blacks compared to those with "mostly Asian" friends. On the other hand, having "mostly White" as opposed to "mostly Asian" friends did not necessarily increase Asians' feelings of closeness towards Whites as opposed to Blacks, all else being equal. Again, examining the absolute closeness scores, the study found that on average Asians with "mostly Black" friends reported feeling the most distant from Blacks (two points) compared to those with "mostly Asian" (2.26 points) and "mostly White" (2.35 points) friends. Asians with "mostly Black" friends also reported feeling as close to Whites as those with "mostly White" friends—three points and 3.06 points, respectively. On the other hand, Asians with "mostly Asian" friends felt slightly closer to Whites (2.65) than to Blacks (2.26). In contrast to the friend effects, there were no neighborhood contact effects on Asians' relative closeness to Whites vis-à-vis Blacks. R-squared increased from 0.12 to 0.17 when the racial triangulation predictors were added to the model.

Table 2.3 Asian & Black Models: Racial Triangulation & Perceived Closeness to Outgroups

DV: Closeness to Whites vis-à-vis Blacks	Asians		Blacks	
Closeness to Asians vis-à-vis Whites	(1)	(2)	(3)	(4)
Independent Vars:				
Realistic Group Conflict				
White Threat	-0.09 (.08)	-0.10 (.07)	**0.18***(.05)**	**0.18***(.05)**
Asian Threat	---	---	**-0.17**(.05)**	**-0.15**(.05)**
Black Threat	0.12 (.08)	0.11 (.08)	---	---
Racial ID				
Ingroup Closeness	-0.04 (.06)	-0.03 (.07)	**0.11*(.06)**	**0.14*(.06)**
Linked Fate	-0.07 (.09)	-0.01 (.09)	0.12 (.09)	0.15 (.09)
Friend Ethnic Mix				
(Ref: Mostly Asian or Mostly Black)				
Mostly White	0.20 (.15)	0.23 (.15)	-0.03 (.24)	-0.10 (.24)
Mostly Black	**0.70***(.17)**	**0.91***(.24)**	---	---
Mostly Hispanic	0.47 (.46)	0.44 (.45)	**1.10*(.53)**	0.88 (.59)
Mostly Asian	---	---	-0.69 (.57)	-0.69 (.57)
Mixed	0.01 (.09)	0.04 (.09)	-0.09 (.08)	-0.11 (.08)
Neighborhood Ethnic Mix				
(Ref: Mostly Asian or Mostly Black)				
Mostly White	0.24 (.18)	0.28 (.18)	-0.02 (.13)	-0.04 (.13)
Mostly Black	-0.08 (.35)	-0.31 (.34)	---	---
Mostly Hispanic	-0.27 (.23)	-0.22 (.23)	-0.09 (.13)	-0.07 (.14)
Mostly Asian	---	---	0.004 (.33)	-0.02 (.33)
Mixed	0.06 (.19)	0.12 (.19)	0.06 (.11)	0.08 (.11)
Symbolic Racism	**0.24**(.08)**	**0.18*(.09)**	-0.13†(.07)	-0.12 (.07)
Principle Values				
Political Ideology	-0.03 (.04)	-0.04 (.04)	-0.01 (.03)	-0.02 (.03)
Individualism				
No One to Blame	0.01 (.05)	0.01 (.05)	0.02 (.04)	0.02 (.04)
Land of Opportunity	-0.04 (.06)	-0.05 (.06)	0.02 (.05)	0.05 (.05)
(In)equality	-0.004 (.04)	0.01 (.05)	0.02 (.04)	0.03 (.04)
Racial Triangulation				
Superior-Inferior		**0.13***(.03)**		-0.01 (.02)
Outsider-Insider		-0.08†(.04)		**-0.10*(.04)**
Sociodemographic Controls				
Education	0.05 (.05)	0.05 (.04)	0.001(.04)	0.01(.04)
Log Income	0.03 (.05)	0.005 (.05)	-0.04 (.04)	-0.05 (.04)
Age	-0.0003 (.003)	-0.001 (.003)	-0.004 (.003)	-0.002 (.003)
Gender (Male=1)	0.02 (.09)	0.02 (.09)	-0.07 (.08)	-0.05 (.08)
Foreign Born	0.02 (.10)	-0.11 (.10)	---	---
Constant	-0.50 (.74)	-0.10 (.75)	-0.09 (.53)	0.05 (.55)
Observations	*N*=409	*N*=386	*N*=640	*N*=607
R-Squared	0.12	0.17	0.08	0.08

Note: Estimated using Ordinary Least Squares (OLS) Regressions; standard errors in parentheses.
†p<0.10; * p<0.05; ** p<0.01; *** p<0.001

Black Model. Specifications 3 and 4 in Table 2.3 show the results for Blacks. The model minority stereotype was not associated with Blacks' relative closeness to Asians vis-à-vis Whites, all else being equal. However, Blacks moved 0.10 points closer to Whites relative to Asians when Blacks' perceptions of the importance of US-born status in being "truly American" increased by a unit ($p<0.05$). This supports the study's hypothesis that racial triangulation will drive Blacks further away from Asians, distancing and dividing minority groups.

In addition to racial triangulation, realistic group conflict, racial identity, and interracial contact each explain Blacks' relative closeness to Asians vis-à-vis Whites. A unit increase in threat from Whites was associated with a 0.18-point increase in Blacks' affinity towards Asians vis-à-vis Whites, all else being equal ($p<0.001$); threat from Asians, on the other hand, pushed Blacks toward Whites vis-à-vis Asians ($p<0.01$). The more Blacks identified with their own racial group via feelings of closeness—and not via linked fate—the closer they felt to Asians vis-à-vis Whites on the relative closeness scale ($p<0.05$). Compared to Blacks with "mostly Black" friends, Blacks with "mostly Hispanic" friends felt relatively closer to Asians on the Asian-White closeness continuum, *ceteris paribus* ($p<0.05$); however, once the racial triangulation predictors were included in the Black model, the ethnic composition of friends no longer mattered for Blacks' relative closeness toward Asians vis-à-vis Whites. The R-squared value of 0.08 did not change with the addition of the racial triangulation predictors.

DISCUSSION

Despite the diversifying racial and ethnic composition of the U.S. general population since the Hart-Celler Act of 1965, existing studies on intergroup relations have predominantly focused on the beliefs, attitudes, and behaviors of Whites toward Blacks (Bobo & Hutchings, 1996; Bobo, 1999; Kim, 1999; Michalikova & Yang, 2011). Following in the footsteps of scholars as Blumer, Jost & Banaji, and Kim, the current study examines the psychological distance of not only Whites but Asians and Blacks toward racial outgroups, utilizing Claire Kim's racial triangulation theory. The study examined three models: One for Whites; another for Asians, and the third for Blacks. Each examined whether Kim's two dimensions of racial triangulation added to our understanding of relative outgroup closeness. The superior-inferior dimension, associated with the model minority stereotype of Asians, was proxied by people's perceptions of Asians as more hardworking than Blacks; whereas the insider-outsider dimension,

tied to the perpetual foreigner stereotype of Asians, was proxied by whether one needs to be born in the U.S. to be considered a "true American."

Findings and Significance: Beyond the Black-White Divide and Static Attitudes

The present study finds empirical support for the main thesis that racial triangulation beliefs are associated with the relative affinity individuals feel between two outgroups. As hypothesized, regression analyses show that Whites who endorsed the model minority stereotype felt closer to Asians vis-à-vis Blacks than those who did not hold the view, while Whites who agreed with the perpetual foreigner stereotype felt closer to Blacks vis-à-vis Asians than those who did not agree with the stereotype, *ceteris paribus*. As for Asians, the model minority stereotype was positively associated with their relative closeness to Whites vis-à-vis Blacks, since the stereotype places Asians above Blacks on the superior-inferior dimension. There was marginal evidence that Asians who internalized the perpetual foreigner stereotype showed a tendency to feel relatively closer to Blacks than to Whites, which again supports the hypothesis that Asians who feel alienated tend to identify more with Blacks than Whites than Asians who do not feel as marginalized. Lastly, the perpetual foreigner stereotype seemed to work in the opposite direction for Blacks: Blacks who endorsed the view tended to identify more with Whites relative to Asians than Blacks who did not hold the view. However, contrary to the hypotheses that both stereotypes would divide and create distances between minority groups by drawing Blacks further away from Asians, the model minority stereotype was not associated with Blacks' relative psychological distance to Asians vis-à-vis Whites. Overall, the current results support Kim's racial triangulation hypothesis that racial stratification is multidimensional and that the relative valorization and ostracism of Asians function to distance and divide minority groups for the sake of preserving the existing racial hierarchy.

The main contribution of the current study to extant research is threefold: it incorporates the perspectives and emotions of multiple racial groups toward outgroups; assesses the *relative* racial attitudes of individuals toward one outgroup vis-à-vis another outgroup; and finally empirically examines the link between legitimizing racial stereotypes and the relative psychological distance individuals feel toward racial outgroups. That is, the present study aimed to move beyond the Black-White binary in explaining racial attitudes by including Asians in the equation of interracial attitudes and incorporating the viewpoints and emotions of all the three

groups. Also, to the best of my knowledge, no work has empirically examined the link between racial-order-legitimizing stereotypes and the *relative* psychological distance of members of one racial group toward two outgroups. Ample research has been conducted on how individuals identify with and favor their racial ingroup, which in turn is associated with outgroup competition, hostility, ambivalence, avoidance or negligence. Today, it is common knowledge that people possess ingroup bias. However, not much is known about how people react towards two or more outgroups and what makes them identify more with one outgroup over another. Furthermore, the study supports a dynamic model of racial attitudes toward outgroups, as people's relative psychological distance toward outgroups varies depending on the racial stereotypes people hold.

More recent research efforts have called on scholars to contextualize their work on stereotypes by connecting these belief systems to the sociostructural factors that generate and sustain them (Augoustinos & Walker, 1998; Crandall et al., 2011; Jost & Banaji, 1994). According to these researchers, for too long, studies on stereotypes have focused on individual-level factors and have treated these distortions and overgeneralizations as products of a natural and necessary mental activity for processing an overflow of information. Going back to the classic argument by Blumer (1958), race prejudice should be understood in the context of group positions. Individuals can initially vary in their feelings toward other races (e.g., some can be more egalitarian and hospitable than others), but when their racial group position is threatened, these individuals can exhibit race prejudice based on their group identity. Thus, individual feelings result from the ideologies and social structures that define group positions.

The present study supports this argument as the model minority and perpetual foreigner stereotypes assign Asians and Blacks to their respective group positions in the U.S. racial hierarchy, which then are associated with how they feel towards the other minority group in relation to the dominant group. These status-defining stereotypes are also related to how people from the dominant group feel towards the various minority groups. If individual feelings were solely dependent on other individual-level factors, then these status-defining stereotypes should not have been associated with how people feel towards outgroups. Hence, while this study examines individual feelings, these feelings are contextualized within system-legitimizing beliefs and therefore should be understood at a more abstract and structural level.

However, this study also challenges Blumer's (1958) conceptualization of racial stratification, which describes racial order in simple linear racial hierarchies. Following Kim's (1999) identification of two dimensions, I argue there are multiple dimensions to racial stratification—some stereotypes hierarchically stratify while others work to include/exclude racial groups. All in all, the study finds significant support for the argument that race relations are not linear but multidimensional and relative. Race relations consist not only of simple linear racial hierarchies but also of other types of relations, such as exclusion-inclusion.

Additionally, the current findings partially support the arguments by Jost and Banaji (1994) that stereotypes serve a system-justifying function and that minorities internalize the negative stereotypes assigned to their own group in order to defend the status quo, often at the expense of their individual and group interests. That is, minorities develop a sense of false consciousness, siding with the interests of the dominant group and legitimizing social inequalities and an unequal social system. The current results show that Asians and Blacks do endorse system-justifying racial stereotypes—both Asians and Blacks subscribe to the model minority stereotype, viewing Asians as more hardworking than Blacks; Blacks, on the other hand, tend to believe a "true American" is a person born in the U.S. Despite the fact that such stereotypes limit the power and status of minority groups, these stereotypes are associated with the interracial feelings of Asians and Blacks. Asians who internalize the model minority stereotype side with Whites relative to Blacks than Asians who do not, and Blacks who endorse the perpetual foreigner stereotype identify more with Whites relative to Asians than Blacks who do not, *ceteris paribus*.

However, contrary to the assertions of Jost and Banaji (1994), minority groups do not blindly internalize stereotypes that are self-defeating and detrimental to their own group. The current study shows that minority groups actually selectively internalize the stereotypes that enhance their status relative to that of the other minority group. For instance, only the model minority stereotype draws Asians closer to Whites relative to Blacks, whereas for Blacks it is the perpetual foreigner stereotype that brings them closer to Whites vis-à-vis Asians. While the activation of these stereotypes can help the dominant group maintain its power and privilege through the support from minority groups, only the relatively positive ones motivate a minority group to identify with the dominant group vis-à-vis the other minority group. Thus, contrary to

prior research that portrays minorities as passive and ill-advised, the present findings imply they have agency and are strategic in when they side with the dominant group.

It can also be observed that the three racial groups each have a distinct pattern of relative feelings of outgroup closeness. The three predictors of Whites' relative emotional distance to Asians vis-a-vis Blacks were the ethnoracial composition of Whites' friends, supporting the contact theory; their perceived competition and threat from Asians (but not from Blacks); and their beliefs in the model minority and perpetual foreigner stereotypes. For Asians, symbolic racism and racial triangulation beliefs were important predictors of their psychological distance to Whites relative to Blacks; while realistic group conflict, racial identity, and the perpetual foreigner stereotype best explained Blacks' relative affinity to Whites vis-à-vis Asians.

Numerous studies have confirmed Allport's contact hypothesis by showing that contact with outgroup members in amicable contexts, such as via friendships, reduced prejudice toward these outgroups. However, what has not been clear is whether and how contact with one outgroup affects the relative closeness an individual feels toward other outgroup(s). The present findings show that the majority of Whites mingled with people from their own racial group and felt slightly closer to Blacks than to Asians. Compared to the majority, Whites who mainly socialized with minority friends who were not Asians, such as Blacks or Hispanics, were consistently drawn closer to Blacks relative to Asians, whereas those with mostly Asian friends did not necessarily feel closer to Asians vis-à-vis Blacks. Rather, the latter group felt close to both Asians and Blacks. The fact that Whites who associate with Blacks and Hispanics feel as distant to Asians as Whites who tend to keep to themselves support prior observations that despite being minorities, Asians are often perceived and treated as being more privileged and closer to the status of Whites than other ethnoracial minorities.

According to Fiske et al. (2007), Asians are in the stereotype category that induces cold and envious feelings. However, reflecting on the aforementioned results and tying them to the stereotype content model, it is less clear what type of feelings Black stereotypes generate. Historically, Whites have shown both paternalistic (e.g., warm, sympathetic, but viewing Blacks as incompetent) and resentful (i.e., cold, disdainful, and viewing Blacks as incompetent) attitudes toward Blacks. Future research may benefit by exploring if and when one feeling overrides the other given two competing racial stereotypes. For instance, when activated in isolation from the other, Asian and Black stereotypes may generate envious and resentful feelings, respectively.

However, when these two racial stereotypes are activated at the same time, it could be possible that the resentful feelings toward Blacks are replaced by paternalistic ones, depending on which outgroup is more relatable to and extended the ingroup status by Whites. While existing frameworks as the stereotype content model are intuitive and insightful, there is still much to be gained by incorporating multidimensional (i.e., going beyond the Black-White dichotomy and the linear racial hierarchy model) and contextualized (e.g., when two competing stereotypes are triggered) approaches to racial stereotypes and interracial affect.

Additionally, in contrast to the ethnic mix of friends, the ethnic composition of neighborhoods did not influence Whites' relative prejudice towards Asians vis-à-vis Blacks, arguably due to the fact that modern-day neighborhoods are not as tight-knit as they were in the past. For Blacks, contact did not influence relative outgroup closeness, while for Asians, contact with Blacks actually made them relatively more distant from Blacks vis-à-vis Whites, resonating with prior observations that contact under unfavorable conditions can intensify, rather than ameliorate, conflict (Amir, 1976; Forbes, 1997 as cited in Pettigrew & Tropp, 2006).

While symbolic racism, or sociocultural prejudice, has consistently been found to predict Whites' prejudice toward Blacks (Kinder & Sears, 1981), it did not explain Whites' prejudice toward Blacks *relative to* Asians. Put differently, anti-Black attitudes did not make Whites feel any closer to Asians relative to Blacks, implying the status of Asians were unaffected by anti-Black attitudes. This finding further supports the argument of the present study that negative perceptions and stereotypes of Blacks representing symbolic racism are substantially different from those that position minority groups along a racial order. Thus, anti-Black attitudes alone are insufficient in predicting Whites' relative outgroup attitudes.

Interestingly, however, even after controlling for the effects of racial triangulation stereotypes, Asians who shared the sentiments of Whites' racial resentment toward Blacks felt closer to Whites than to Blacks than those who did not identify with White anti-Black attitudes. Combining this finding with those that show Asians preferring to live in White neighborhoods than in minority neighborhoods, including Asian ones, and befriending Whites more than other minorities need further examination as they may indicate barriers to cross-racial coalition building among minorities for the advancement of minority status and rights. In fact, researchers have found that minority groups higher on the social ladder tend to detach themselves from

lower-status minority groups out of concern that the association will hamper social mobility and hurt their own identities.

Another noteworthy finding is that realistic group conflict theory proved not to be as effective in explaining relative outgroup attitudes of Whites and Asians as it is in making sense of the attitudes of Blacks. Therefore, contrary to the claims by scholars in the realistic group conflict camp, threat and competition do not fully explain the racial attitudes of Asians and Whites, the gap of which is filled by the racial triangulation thesis.

Lastly, the present study aimed to address the conceptual ambiguity surrounding stereotypes, prejudice, emotions, and discrimination. Based on the multidimensional model of attitude structure, prejudice is defined as having at least three dimensions, the cognitive, the affective, and the behavioral components. In contrast to prior research which has attempted to predict affect-laden concepts, such as favorability, with feelings (Abelson et al., 1982; Stangor et al., 1991), this study argues that prejudice should be thought of as an overarching negative attitude with three dimensions and that each dimension represents an aspect of prejudice itself. Therefore, to hypothesize that affect is a better predictor of prejudice than cognition is considered tautological since "favorable/unfavorable" is a variation of "like/dislike." Instead, the present study examined the relationship between cognitive and affective bias and found that racial-hierarchy-legitimizing stereotypes are associated with relative feelings of closeness toward one racial outgroup *vis-à-vis* another.

Limitations

While the present study has been able to uncover the link between racial-order legitimizing stereotypes and relative outgroup affinity, it has several limitations that should be addressed in future research. First, the present study used self-report measures of bias, such as how hardworking individuals perceive different racial groups to be and whether they report anti-Black attitudes. Recent trends in research has been to incorporate automatic and implicit measures of bias since people may not always be aware and conscious of their beliefs, feelings, and behaviors (e.g., aversive racism) or may give socially desirable answers to avoid appearing racist. Implicit measures tap into the unconscious, automatic aspects of racial attitudes. Scholars argue that the weak correlations found between implicit and explicit measures should not be

construed as either being a weak approach but should be understood as reflecting the various levels of racial attitudes and levels of awareness (Dovidio et al., 2012).

Another conceptual-methodological limitation is that while the present study conceptually agrees with the multidimensional model of attitude structure, it relies on existing Likert-type single-item scales, which are unidimensional, to measure racial stereotypes and relative feelings of closeness to racial outgroups. In the future, there needs to be more debate and work on attitude structures, specifically regarding how many dimensions form an attitude and how to adequately measure each dimension.

Also, while the present operationalization of the relative hardworking and closeness scales can lead to interpretive difficulties and substantive loss of information,[16] this chapter aimed to model and test the claim that racial groups are not positioned along a simple linear hierarchy as previously conceptualized by Blumer (1958) and others; but that there are multiple dimensions of racial stratification. Therefore, given the limitations in data, I tried the best I could to model the multidimensional and relative aspects of racial stratification by generating relative scales by score subtractions.

Also, because the present study is cross-sectional, causal inference cannot be made. Past research has often treated the justification function of stereotypes as a *consequence* of prejudice or unequal social structures (Crandall et al., 2011; Hoffman & Hurst, 1990; Jost & Banaji, 1994; Jost, Banaji, Nosek, et al., 2004). While stereotypes may originally arise from rationalizing existing power and status differences among social groups and legitimizing unequal social arrangements and treatment, this chapter focused on how legitimizing racial stereotypes, once established, were associated with relative feelings of closeness to one outgroup over another.

There apparently is an endogenous relationship between stereotypes and differences among racial groups, whether the differences are in interracial feelings, behaviors, or socioeconomic status. Previously, it was argued that there is a "kernel of truth" in social stereotypes (Allport, 1954; Oakes et al., 1994). Today, however, the claim that stereotypes are accurate depictions of social characteristics is being challenged (Jost & Banaji, 1994); and instead, scholars are arguing that even false depictions can serve a self-fulfilling function to

[16] For instance, by subtracting the scores, people who equally but negatively evaluate the outgroups are treated the same as those who equally positively evaluate the outgroups as they both get assigned a value of zero.

make this falsity into a reality (e.g., Steele's "stereotype threat"; Lee's "stereotype promise). In short, racial differences, whether imagined or real, can generate racial stereotypes, which then can have a real impact on creating or intensifying the differences (Dovidio, Brigham, Johnson, & Gaertner, 1996; Esses, Haddock, & Zanna, 1993; Stephan & Stephan, 2000).

A fourth limitation is that the r-squared values are low—0.15 for the White model, 0.17 for the Asian model, and 0.08 for the Black model—indicating that only a small proportion of the variability in data is explained by the racial triangulation models. However, the purpose of the current study was to examine whether racial triangulation is a valid framework for explaining relative outgroup attitudes. The intention was not to replace but to complement competing theories on racial attitudes. Therefore, the small r-squared values suggest that racial triangulation is not the primary explanation for relative outgroup attitudes but still can explain a small but reliable relationship between legitimizing racial stereotypes and relative outgroup closeness.

Last but not least, the current study does not include Hispanics, the largest minority group in the U.S. As a salient group in the U.S. racial hierarchy, whose stratification and its effects are undoubtedly important for gaining a fuller and more complete understanding of ethnoracial relations, future studies need to incorporate the attitudes of and toward Hispanics in relation to the racial-order legitimizing myths. Existing frameworks such as the racial diamond model by Masuoka and Junn (2013) may provide a good starting point.

Given the shortcomings of this chapter, future studies on racial stereotypes should incorporate both implicit and explicit biases and address the endogeneity problem with more elaborate and rigorous designs to generate valid knowledge and see whether the current findings are replicable.

Conclusion and Implications

A series of recent tragedies involving law enforcement and the Black community has brought race to the forefront of national attention. However, even as interest in race was waning at the turn of the twentieth century, scholars have argued the continuing "centrality of race" in American politics (Hutchings and Valentino, 2004).

The present study shows that racial attitudes are not static and that they should be understood in the dynamic context of group position and racial order. People's attitudes change depending on which and how many groups are taken into consideration when determining their

perceptions, beliefs, and feelings toward these groups. Moreover, the racial order is not unidimensional nor simply linear. Racial triangulation theory proposed two dimensions, the superior-inferior and the outsider-insider axes, but racial stratification happens along multiple dimensions and future research should endeavor to develop empirically-testable theories that comprehensively model the real world. Furthermore, a multidimensional approach to prejudice is taken to reduce the confusion and ambiguity around the concepts of stereotypes, affect, preference, and discrimination. Careful thought needs to be put into future research designs in order to avoid a tautology.

Additionally, the current study has filled an important gap in research on Asians Americans. Due to practical limitations of data, Asian Americans have often been left out of research on racial prejudice and attitudes. However, recent improvements in the quality of nationally representative data have enabled research on understudied groups such as Asians in this study. The current findings reveal distinct patterns of racial attitudes by group and that many of the existing, classical theories which have developed around Whites' attitudes toward Blacks cannot be directly applied to Asians and Blacks. That is, the "one-size-fits-all" approach to understanding racial attitudes, based on models developed from White attitudes, does not work to explain the distinct experiences, positions, and interests of racial minorities in the U.S. racial hierarchy. The present study shows that both Asians and Blacks strategically internalize the stereotypes that relatively enhance the position and interests of their group vis-à-vis those of the other group, among the pool of stereotypes assigned to their group. Also, different theories work for different racial groups in explaining their relative affinity to outgroups—e.g., the contact model for Whites; the anti-Black attitude model for Asians; and the group conflict model for Blacks.

Lastly, the present study shows that racial stratification and its system-justifying stereotypes are significantly associated with how minority groups identify with Whites relative to each other—Asians who internalized the model minority stereotype were more likely to feel closer to Whites relative to Blacks than those who did not internalize the stereotype and Blacks who endorsed the perpetual foreigner stereotype were more likely to identify with Whites than with Asians compared to Blacks who did not. The troubling implication of these findings is that such system-legitimizing stereotypes divide minority groups and prevent them from identifying with each other and recognizing their shared group interests as marginalized and excluded

minorities—helping to maintain chronic social inequities. Moreover, as the next chapter shows, racial outgroup affinity predicts how Whites perceive and react to policy choices such as affirmative action.

Given the community-oriented nature of the social work profession, it is particularly important for social workers to be trained and equipped with the knowledge on intergroup biases and how different racial communities perceive, feel, and react not only to the dominant group but also to other minority groups. Although the current implications may seem depressing, social workers are in a good position to take advantage of the knowledge generated from this research and put them into practice to counter the detrimental consequences of prevalent racial stereotypes, such as the model minority and the perpetual foreigner. Knowing which beliefs to counter (e.g., anti-Black attitudes of Asians and zero-sum beliefs of Blacks) and which distorted images get in the way of building constructive race relations, social workers can devise more effective and targeted plans for community-organizing and cross-racial coalition-building, with the broader objective of countering social inequality and institutional discrimination.

Chapter 3

Racial Triangulation, Interracial Closeness, and Attitudes toward Affirmative Action

INTRODUCTION

Few policies have been as controversial and divisive as affirmative action (Awad, Cokley, & Ravitch, 2005; Eden & Ryan, 1999). While affirmative action is a set of policies and practices that aim to redress the effects of past and ongoing discrimination against women and minorities (Eden & Ryan, 1999), major clashes and contentions in the past two decades revolved around race-conscious university admissions policies. The first critical challenge to affirmative action in higher education came in 1978 in the *Regents of the University of California v. Bakke*, where the Supreme Court acknowledged race as a legitimate factor in university admissions but set limits on affirmative action by ruling against racial quotas. However, it was not until the mid-1990s that the constitutionality of race-based admissions policies in higher education began to be intensely questioned and brought to the forefront of national debate. In *Hopwood v. the University of Texas Law School* in 1996, the U.S. Court of Appeals for the Fifth Circuit ruled that the school "may not use race as a factor in law school admissions"[17] and disagreed with Bakke that there was a compelling state interest in achieving educational diversity, especially through racial preferences[18] (Scanlan, 1996). This ruling, however, was reversed by *Grutter v. Bollinger* on June 23, 2003 (Brunner& Rowen, 2007).

At both the federal and state levels, a series of challenges to affirmative action in higher education followed *Hopwood v. Texa*s. Following in the footsteps of Bakke, in both *Gratz v. Bollinger* (2003) and *Grutter v. Bollinger* (2003), the Supreme Court determined that there was a compelling state interest in achieving a diverse student body and that it was constitutional to

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[17] Hopwood v. Texas, 78 F.3d 932, 935 (5th Cir.), cert. denied, 116 S. Ct. 2581 (1996)

[18] Despite appeals from the University, the Supreme Court denied certiorari, allowing the Fifth Circuit's ruling to stand.

consider race as one of many factors in admissions. However, it ruled against a separate admissions process for minority students and using race as a sole or decisive factor in admissions (McBride, 2006). That is, in *Gratz v. Bollinger*, the Court found that the University of Michigan's (UM) then undergraduate admissions policies of automatically assigning 20 out of 100 points to minority applicants on the basis of race was unconstitutional because the practice was not sufficiently narrowly tailored; whereas, in *Grutter v. Bollinger*, it upheld the UM Law School's use of race in admissions because it was considered as one of many factors in an individualized, holistic review of applicants.

The most recent challenge to affirmative action at the national level involves the University of Texas at Austin (UT). Upon being denied admission to UT in 2008, Fisher claimed that her equal protection rights were violated by UT's race-conscious admissions policies and that they were unconstitutional. In the first *Fisher v. University of Texas at Austin* (*Fisher I*; 2013), the Supreme Court sent the case back to the Fifth Circuit for further review, asking the lower court to assess UT's admissions policies under "strict scrutiny" as outlined in Grutter and Bakke (American Council on Education, 2016). The Fifth Circuit revisited the case but again found in favor of UT. In response to Fisher's second appeal, the Supreme Court finally ruled on June 23, 2016 in *Fisher II* that the admissions policies of UT were constitutional and upheld the university's claim that there was no other way for the school to achieve the level of student diversity without the consideration of race in admissions.

Proponents of affirmative action feared that Fisher would end the principles established under Bakke and Grutter but were relieved to find that race was still considered a legitimate factor in university admissions. Fisher, however, has made the standards more stringent for colleges and universities to meet in order to comply with the law—that is, higher education can only consider race in admissions if they can pass strict scrutiny for why they need educational diversity, whether their policies are narrowly tailored, and how the goal of diversity cannot be achieved through other means than affirmative action (Nelson, 2016).

While landmark Supreme Court cases, such as *Gratz v. Bollinger* (2003), *Grutter v. Bollinger* (2003), and *Fisher v. University of Texas* (2013, 2016), have mixed implications for the future of affirmative action in college and university admissions, the trend at the state level has been to ban affirmative action in public education, employment, and contracting. The following state measures have prohibited affirmative action in higher education: California's

Proposition 209 (1996); Washington's Initiative 200 (1998); Florida's "One Florida" (1999); Michigan's Proposal 2 (2006); Nebraska's Initiative 424 (2008); Arizona's Proposition 107 (2010); New Hampshire's House Bill 0623 (2011); and Oklahoma's State Question 759 (2012) (Brunner& Rowen, 2007; NCSL, 2014).

Conventionally, three competing explanations have been provided for why Whites support or oppose affirmative action policies. The first argument is that racism towards Blacks continues to plague U.S. society. While explicit Jim Crow racism has declined, a new, subtle form of symbolic racism has been on the rise towards Blacks, resulting in opposition to policies aimed at improving the opportunities of Blacks. The second argument emphasizes the attachment of Whites to the American core beliefs and values, such as economic individualism, freedom, and equal opportunity. According to this line of argument, Whites oppose affirmative action not because of racial resentment towards Blacks but because of their adherence to these values and the belief that affirmative action violates these principles. The last argument is that there are real, competing group interests involved in racial policies and that Whites oppose affirmative action in fear of losing ground as Blacks rise up the social ladder.

BACKGROUND

Numerous studies have presented empirical evidence that support the hypotheses of symbolic racism, principle values, and perceived threat. However, the current study aims to fill in the gaps that are not addressed by these three explanations. First, while symbolic racism may be strongly associated with Whites' opposition to affirmative action, even after controlling for political ideology and perceived threat (Bobo, 2000; Kinder & Sanders, 1996), it does not provide a structural explanation for why individuals hold such racial prejudice. This stance focuses on individuals' learned behaviors and attitudes from their immediate environment, such as families and friends, to explain the transmission, prevalence, and persistence of racial prejudice. The principle American values approach, similar to symbolic racism, does not identify the underlying structural incentives for Whites in steadfastly adhering to the foundational American values. It accepts Whites' attachment to American core values at face value and treats it as a neutral attitude with pure motives. Historically, however, the foundational American values of individualism, freedom, and equality have applied differently to Whites vis-à-vis racial

minorities and by appealing to these seemingly neutral values Whites have been able to justify and maintain their privilege and rights at the expense of those of racial minorities.

The perceived threat hypothesis, on the other hand, does provide the structural explanation for why Whites oppose affirmative action and highlights the role of real competing interests (Bobo, 2000). While the current study shares the view that opposition to affirmative action is tied to Whites' interests in maintaining the existing social order, it does not agree with the argument that perceived threat is the main mechanism through which group position influences stances on affirmative action. As argued by scholars of symbolic racism, even in the absence of threat, Whites have consistently shown racial resentment toward Blacks and this tendency has influenced opposition to affirmative action. Also, compared to policies on minimum wage and universal health care, affirmative action does not directly impact the daily lives of most Americans. Even if individuals subconsciously feel threatened, most who oppose affirmative action may not realize it as a direct threat to their well-being. Rather, the sensationalization of the issue is at a more abstract and moral level of whether it is "right" or "wrong" to have a separate policy that benefits minorities.

Therefore, the current study borrows from the racial triangulation theory in explaining opposition to affirmative action. Like the perceived threat hypothesis, it is based on the concept of group position and the interests of the dominant group in maintaining the status quo. However, unlike the perceived threat hypothesis, I argue that it is not the direct threat that individuals perceive but the internalization/endorsement of the legitimizing myth of the U.S. racial hierarchy that justifies Whites' opposition to affirmative action. Unlike symbolic racism or principle values, legitimizing myths are not mere hatred based on irrational beliefs or purely neutral attachments to American core values; rather, they are a deeply ingrained belief system that rationalizes racial prejudice and convinces individuals that their views are logically justified based on facts (e.g., Asians have higher median income and education levels even though they are minorities). In the past, these legitimizing myths included statements about Blacks intelligence; today, most resort to cultural differences. Therefore, while statements such as "Blacks are lazy" are an overt form of racism, they continue to exist (Henry & Feldman, 2009) and individuals who endorse these statements do not perceive themselves as irrational or racist.

Additionally, by utilizing the racial triangulation theory, the legitimizing myth approach is able to move beyond the focus on Whites' attitudes toward affirmative action and examine the stances of minorities, such as Blacks and Asians, on affirmative action.

Lastly, the current study explores whether feelings of closeness as an outgroup identifier and recategorization tool (Craemer, 2008) encourage cross-racial support for policies that advance minority interests, such as affirmative action. The study compares absolute measures of closeness toward outgroups (e.g., closeness to Blacks) with relative measures of closeness between two outgroups (e.g., closeness to Blacks vis-à-vis Asians) and explores whether the latter, which is based on the argument that racial stratification is a relative experience and should be examined in relative terms, does a better job of explaining attitudes toward affirmative action.

METHODS

Sample

As an extension of the research in the previous chapter, the current study once again analyzed data from the National Politics Study (NPS, 2004)[19]. The total sample size is 3,339 respondents, of which 919 were non-Hispanic White; 756 African American; 404 Caribbean Black; 757 Hispanic; and 503 Asian. In addition to information on interracial closeness, group competition, racial resentment, beliefs in American core values, and racial stereotypes, the NPS provides data on attitudes toward racial policies, such as affirmative action.

Measures

Dependent Variables

Support for or opposition to affirmative action policies was the dependent variable for the study. The original NPS item asks, "Affirmative action refers to any policy or law used to give qualified individuals equal access to employment, education, business, and contracting opportunities. Generally speaking, do you think affirmative action is a good thing or a bad thing?" Three ordinal categories were created from this original item where "good thing=1; neither=0; and bad thing=-1."

[19] Jackson, James S., Vincent L. Hutchings, Ronald Brown, and Cara Wong. National Politics Study, 2004. ICPSR24483-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-03-23. http://doi.org/10.3886/ICPSR24483.v1

Independent Variables

Superior-Inferior Dimension (Model Minority Stereotype). Once again, the hardworking stereotype of Asians vis-à-vis Blacks was used to measure the superior-inferior dimension of racial triangulation. The scores of Blacks were subtracted from the scores of Asians, both of which are on a 7-point scale where "1=lazy; 4=neither end; and 7=hardworking." The constructed variable ranges from -6 to 6, where positive values indicate that people believed Asians were more hardworking than Blacks and negative values indicate that people believed Blacks were more hardworking than Asians.

Insider-Outsider Dimension (Perpetual Foreigner Stereotype). The insider-outsider dimension was measured on a 4-point Likert-type scale of how important people believed it was to be born in the U.S. to be considered "truly American." The response options were reverse coded so that the higher the value, the more important it was to be born in the U.S. to qualify as a true American (range: 1-4).

Absolute Closeness to Outgroups. Absolute closeness was measured on a 4-point Likert-type scale that asked individuals how close they felt to each racial group, including their own. Response options were reverse coded so that "very close=4; fairly close=3; not too close=2; and not close at all=1". In the White model, closeness to Asians and closeness to Blacks were included; in the Asian model, closeness to Whites and closeness to Blacks; and in the Black model, closeness to Asians and closeness to Whites.

Relative Closeness between Outgroups. The relative outgroup closeness scale was constructed from the aforementioned absolute closeness scale by subtracting an individual's closeness rating of one racial outgroup from that of another racial outgroup, resulting in a scale that ranges from -3 to 3. Positive values on the scale indicate that individuals felt closer to the first outgroup compared to the second and negative values indicate that individuals felt closer to the second outgroup compared to the first. Three relative outgroup closeness scales were created: Whites' closeness to Asians vis-à-vis Blacks; Asians' closeness to Whites vis-à-vis Blacks; and Blacks' closeness to Asians vis-à-vis Whites.

Realistic Group Conflict. Three variables measured group threat on a 4-point Likert-type scale: Asian threat, White threat, and Black threat. Each scale was created by averaging the scores on the following two items: "More good jobs for [racial outgroup] mean fewer good jobs for people like me" and "the more influence [racial outgroup] has in politics, the less influence

people like me will have in politics." The response options for each item were reverse coded so that higher values meant more perceived threat from that outgroup. The Cronbach's coefficient alphas were 0.68 for the Asian threat scale; 0.57 for the White threat scale; and 0.65 for the Black threat scale.

Symbolic Racism. Following the guidelines from the Symbolic Racism Scale of 2000 (Henry & Sears, 2002), three items were combined into a 4-point Likert-type scale by averaging the scores across the items. Higher scores on the symbolic racism scale meant more racial prejudice against Blacks. Individuals were asked how much they agreed with the statements that Blacks did not get as much as they deserved; Blacks should work their way up just like other minority groups without asking for favors; and Blacks faced discrimination and unfair treatment in the U.S. Reliability coefficient alphas were 0.62 when respondents were White; 0.53 when they were Asian; and 0.40 when they were Black.

Principle Values. A 4-point Likert-type scale was created to measure people's attachment to American core values. The scale was constructed by averaging the scores on the following four items that were selected based on Feldman's (1988) core beliefs and values scales: 1) "If racial and ethnic minorities don't do well in life, they have no one to blame but themselves"; 2) "America is a land of opportunity in which you only need to work hard to succeed"[20]; and 3) "It is not really that big of a problem if some people have more of a chance in life than others." The response options for each item were recoded so that higher scores meant greater adherence to core American values. Political ideology was entered separately into the models and was measured on a five-point scale, where "extremely liberal=5; slightly liberal=4; moderate=3; slightly conservative=2; and extremely conservative=1[21]."

Control Variables

Education, income, age, gender, and foreign-born status were included in the models as sociodemographic controls. Education is an ordinal variable with five levels: 1=less than high school; 2=graduated high school; 3=some post-high school education and training; 4=graduated

[20] These choices were based on similar items in Feldman's (1988) economic individualism scale: "Most people who don't get ahead should not blame the system; they really have only themselves to blame"; and "Any person who is willing to work hard has a good chance of succeeding" (p.421).

[21] Those who answered "don't know" or "haven't thought about it" were collapsed with the "moderates." Those who refused to answer were treated as missing.

4-year college; and 5=post-graduate education and training. Due to the highly-skewed distribution of data, income was log transformed. Age is in years, ranging from 17 to 100 years. Gender is a dummy variable where males equal one and females equal zero. Individuals who were foreign-born equal one, and those born in the U.S. equal zero.

Analysis Plan

Descriptive statistics including the means, standard deviations, range, and significance levels were analyzed by racial group. Since many of the study variables have already been observed in the previous chapter, the current summary statistics provided information on where Whites, Asians, and Blacks each stood on the issue of affirmative action and how close they felt to each outgroup in absolute terms.

Prior to running the main regression analyses, the study conducted a preliminary assessment of whether the hardworking stereotype of Asians vis-à-vis Blacks measured a separate construct from what the scales of symbolic racism and principle values captured. Since the symbolic racism scale consists of items that assess the degree of racial prejudice against Blacks, one may argue that viewing Blacks as lazy does not diverge too far from what the scale evaluates; or one may question how the underlying constructs differ between an item that questions the work ethic of Blacks compared to that of Asians and items such as "minorities who don't do well in life have only themselves to blame" and "one only needs to work hard in order to succeed." Thus, the current study conducted an exploratory factor analysis (EFA) and also examined the item-rest correlations and Cronbach's coefficient alphas to see if including the relative hardworking item as a proxy for the model minority stereotype could be justified.

For the main analyses, ordinal logistic regressions were run on STATA14 (*ologit, or* command) for each racial group—Whites, Asians, and Blacks. The model specification is displayed in Figure 3.1. Odds ratios of the predictor variables were obtained to explain each racial group's attitudes toward affirmative action policies. While there were concerns for heteroscedasticity, the current study does not correct for it. Unlike OLS, ordinal logistic regressions produce not only inefficient standard errors but also biased coefficient estimates. If indeed heteroscedasticity is present and the ordinal logistic regressions return biased estimates, there is little meaning in using the Huber-White sandwich estimators to produce consistent standard errors. Instead, I ran Brant tests to examine whether the proportional odds assumption,

or parallel regression assumptions, hold—that is, whether the coefficient estimates can be constrained to be the same across all pairs of outcome groups.

Figure 3.1 Conceptual Model of Racial Triangulation and Policy Attitudes Toward Affirmative Action

$$y = \beta_0 + \sum_i \beta_{1,i} Racial\ \ Triangulation_i + \sum_i \beta_{2,i}\ \ Outgroup\ \ Threat_i + \sum_i \beta_{3,i}\ \ Symbolic\ \ Racism_i + \sum_i \beta_{4,i}\ \ Principle\ \ Values_i + \sum_i \beta_{5,i}\ \ Outgroup\ \ Closeness_i + \sum_i \beta_{6,i} Controls_i + u$$

y: *Whites' support/opposition to affirmative action* (White Model)
Asians' support/opposition to affirmative action (Asian Model)
Blacks' support/opposition to affirmative action (Black Model)

RESULTS

Descriptive Statistics

Table 3.1 shows the unweighted summary statistics of the study variables by racial groups. With respect to the views on affirmative action, all racial groups on average reported that affirmative action was a "good thing" ($p<0.001$).

Whites were the most neutral group; whereas Blacks were the most supportive. Whites and Blacks on average felt closer to each other than to Asians ($p<0.001$), while Asians reported feeling closer to Whites than to Blacks ($p<0.001$). On the absolute closeness scale, Whites felt "fairly close" to Blacks and between "fairly close" and "not too close" to Asians. Asians on the other hand felt "fairly close" to Whites and between "fairly close" and "not too close" to Blacks. Lastly, Blacks felt "not too close" to Asians while they were between "not too close" and "fairly close" to Whites.

All three groups endorsed the model minority stereotype of Asians ($p<0.001$); Blacks, however, assessed the difference in hardworking tendencies between their own group and Asians to be small (0.48 points), whereas Asians assessed this difference to be quite large (1.99 points). Whites were neutral towards the idea that in order to be considered "truly American" people had to be born in the U.S.; Asians thought it was "not very important" while Blacks reported it was

"fairly important." Only Blacks "somewhat agreed" that Whites were a threat; as for the rest of the groups, perceived threat was not high. Whites and Asians were neutral towards the statements on Black resentment while Blacks showed some disagreement on them.

All three groups identified themselves as being politically moderate and showed support for core American values. Asians had the highest average education, annual income, and proportion of foreign-born persons.

Table 3.1 Descriptive Summary of NPS by Race (2004; Unweighted)

Variables	Range	White (*n*=738)	Asian (*n*=429)	Blacks (*n*=632)
Views on Affirmative Action	-1 to 1	0.22***(0.93)	0.36***(0.86)	0.71***(0.65)
Relative Closeness to Outgroups				
Asians vis-à-vis Blacks	-3 to 3	-0.25***(0.84)	---	---
Whites vis-à-vis Blacks	-3 to 3	---	0.47***(0.90)	---
Asians vis-à-vis Whites	-3 to 3	---	---	-0.29***(0.96)
Absolute Closeness				
Close to Asians	1-4	2.53 (0.84)	---	2.28 (0.90)
Close to Whites	1-4	---	2.88 (0.71)	2.57 (0.88)
Close to Blacks	1-4	2.78 (0.73)	2.41 (0.79)	---
Racial Triangulation				
Superior-Inferior	-6 to 6	1.06***(1.37)	1.99*** (1.56)	0.48***(1.69)
Outsider-Insider	1-4	2.56 (1.10)	2.23 (1.05)	3.33 (1.00)
Realistic Group Conflict				
Asian Threat	1-4	1.57 (0.74)	---	2.18 (0.90)
White Threat	1-4	---	2.41 (0.74)	2.63 (0.96)
Black Threat	1-4	1.55 (0.71)	2.07 (0.69)	---
Symbolic Racism	1-4	2.52 (0.72)	2.44 (0.67)	2.05 (0.67)
Political Ideology	1-5	2.92 (1.36)	3.14 (1.16)	3.16 (1.25)
Principle Values	1-4	2.90 (0.54)	2.81 (0.52)	2.89 (0.58)
Sociodemographic Controls				
Education	1-5	3.41 (1.15)	4.13 (0.97)	2.86 (1.16)
Log Income	5.66-15.89	10.90 (0.97)	11.22 (0.91)	10.55 (1.05)
Age	18-90	50.24 (16.58)	40.47 (13.68)	45.22 (15.66)
Gender (Male=1)	0-1	0.44 (0.50)	0.60 (0.49)	0.38 (0.49)
Foreign Born	0-1	---	0.75 (0.43)	---

Note: standard deviations in parentheses; †p<0.10; * p<0.05; ** p<0.01; *** p<0.001 (significance tests of whether the estimates were different from zero).

As for sociodemographic characteristics, Asians on average had the highest level of education, followed by Whites and Blacks, and had the highest median income of $70,000 per year, earning 75% more than Blacks and 40% more than Whites. The average age of Whites in the sample was 50 years; Blacks, 45 years; and Asians, 40 years. Over 60 percent of Asians, 43

percent of Whites, and 38 percent of Blacks in the sample were males. As for nativity, 73 percent of Asians were foreign-born while only six percent of Whites and three percent of Blacks were born outside of the U.S.

Construct Validity of the Relative Hardworking Item: A Preliminary Analysis

Scale development and formal testing of construct validity are beyond the scope of this study. However, as a preliminary assessment of whether the hardworking stereotype of Asians vis-à-vis Blacks measures a substantively different construct from symbolic racism and principle values, I ran an exploratory factor analysis with the iterated principal factor method and also examined the inter-item correlations. Overall, results suggest that the relative hardworking item measures a separate construct from symbolic racism and principle values given that its association with the rest of the items was low (low internal consistency).

First, an EFA of the symbolic racism items with the relative hardworking item produced a two-factor solution (scores not presented). The three symbolic racism items loaded on the first factor (loadings above 0.3); while the relative hardworking item loaded on the second factor and alone explained 16 percent of the total common variance of the four items[22]. Figure 3.2 shows a

Figure 3.2 Screeplot of Symbolic Racism Items with Relative Hardworking Item

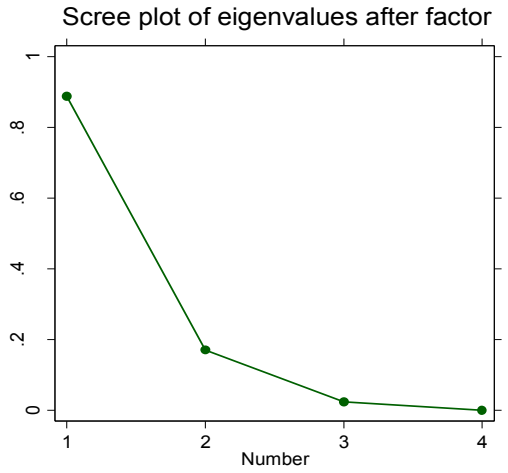
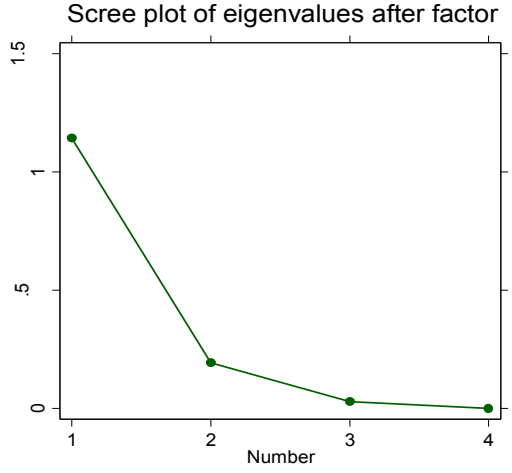


Figure 3.3 Screeplot of Principle Values Items with Relative Hardworking Item



[22] In principal components analysis (PCA) and factor analysis, each item is standardized to have a variance of 1. Thus, the total variance of all items equals the total number of items. While the PCA analyzes the *total* variance of the items, factor analysis analyzes only the *common* variance. Hence, the eigenvalues, which indicate the amount of variance accounted for by each component or factor, sum up to the total number of items in PCA but only to the common variance in factor analysis (Jacoby, 2014).

screeplot, where the number of factors are on the x-axis and the eigenvalues are on the y-axis. The screeplot also points to a two-factor solution since the curve levels off after the "elbow" above the second factor.

Similarly, an EFA of the principle values items with the relative hardworking item pointed to a two-factor solution, where the relative hardworking item alone loaded onto the second factor and explained 14 percent of the total common variance. The screeplot in Figure 3.3 also shows an "elbow" above the second factor.

Next, as shown in Table 3.2, the item-rest correlations and the Cronbach's coefficient alphas were examined to assess the internal consistencies of 1) the symbolic racism scale when combined with the relative hardworking item; and 2) the principle values scale with the relative hardworking item. First, the item-rest correlation shows how each item is correlated with a scale created by the remaining items. We can see from Table 3.2 that the relative hardworking item had the weakest correlation with the remaining three items of each scale across all three racial groups: Specifically, the item-rest correlations of the relative hardworking item with the original scales of symbolic racism and principle values were 0.11 and 0.07, respectively, for Whites; 0.22 and 0.17, respectively, for Asians; and 0.09 and 0.06, respectively, for Blacks. In contrast, the item "Blacks are undeserving" from the symbolic racism scale had a correlation of 0.40 with a scale created from the remaining three items, "Blacks should not ask for favors," "Blacks do not face much discrimination," and "Asians are hardworking compared to Blacks."

The Cronbach's alphas also confirmed that the relative hardworking item had low internal consistency with the original scales of symbolic racism and principle values. In Table 3.2, the values under the column "Cronbach's alpha" show how the reliability coefficient alpha changes when that specific item is deleted from the scale—values that are larger than the coefficient alpha for the overall scale suggest that dropping the item would improve the internal consistency of the scale (Williams, 2015). Results consistently show that the internal consistencies of both the symbolic racism and the principle values scales can be improved by removing the relative hardworking item. For instance, the Cronbach's alpha increased from 0.49 (the alpha for the scale with all four items) to 0.64 when the relative hardworking item was dropped from the symbolic racism scale for Whites; in contrast, if any of the other items in the symbolic racism scale was removed, the alpha for the overall scale decreased (e.g., in the case of Whites, the alpha became smaller than 0.49), rendering the scale less reliable.

All in all, results from the EFA, item-rest correlations, and Cronbach's alphas provide evidence that the relative hardworking item measures a different construct from what the scales of symbolic racism and principle values measure. Hence, the current study used the hardworking stereotype of Asians vis-à-vis Blacks as a proxy for the model minority stereotype and included it in the models for Whites, Asians, and Blacks along with the scales for symbolic racism and principle values.

Table 3.2 Construct Comparisons: Symbolic Racism vs. Relative Hardworking Stereotype; Principle Values vs. Relative Hardworking Stereotype

Items	White (*n*=792; 832[23])		Asian (*n*=429; 456)		Blacks (*n*=664; 688)	
	Item-Rest Corr	Cronbach's alpha	Inter-Rest Corr	Cronbach's alpha	Inter-Rest Corr	Cronbach's alpha
Symbolic Racism						
Underserving	0.40	0.31	0.38	0.33	0.24	0.15
No Favor	0.41	0.30	0.32	0.38	0.18	0.21
No Discrimination	0.33	0.41	0.27	0.43	0.19	0.25
Hardworking Asians v. Blacks	0.11	0.64	0.22	0.53	0.09	0.41
Test Scale		0.49		0.48		0.30
Principle Values						
No One to Blame	0.42	0.19	0.34	0.34	0.26	0.22
Land Opportunity	0.30	0.32	0.37	0.33	0.30	0.20
Equality	0.27	0.34	0.28	0.39	0.22	0.26
Hardworking Asians v. Blacks	0.07	0.60	0.17	0.56	0.06	0.51
Test Scale		0.43		0.46		0.35

Ordinal Logistic Regressions

Table 3.3 shows the results for the White model. All models were run with ordinal logistic regressions and the odds ratios are presented in the table below. The first specification includes the three conventional explanations for Whites' attitudes toward affirmative action. For Whites, a unit increase in racial resentment towards Blacks decreased the odds of being supportive towards affirmative action policies versus being neutral or opposed by a factor of 0.46, holding all the other variables constant ($p<0.001$). On the other hand, being more liberal

[23] The first number of observations is from the test between the symbolic racism items and the hardworking-stereotype item. The second is from the test between the items for principle values and the hardworking-stereotype item.

increased the odds of being more supportive of affirmative action policies, *ceteris paribus* ($p<0.001$). Perceived threat from outgroups was not associated with the attitudes toward affirmative action policies, all else being equal. The second specification shows that the hardworking stereotype of Asians vis-à-vis Blacks was significant in predicting Whites' attitudes toward affirmative action. Specifically, a unit increase in the perceptions of Asians as more hardworking than Blacks decreased the odds of Whites saying affirmative action was good or neutral versus bad by a factor of 0.86, *ceteris paribus* ($p<0.01$). Specification 3 shows that moving closer to Asians vis-à-vis Blacks on the relative closeness scale decreased the odds of Whites being supportive of affirmative action policies. On the other hand, once the model minority stereotype was accounted for in the model, the effect of relative outgroup closeness on White attitudes toward affirmative action policies turned marginally significant, holding all the other variables constant. The last specification used absolute measures of closeness to outgroups instead of the relative closeness scale. Quite surprisingly, the results show that the model minority stereotype was no longer significant in predicting Whites' attitudes toward affirmative action once closeness to Blacks was accounted for. In contrast, closeness to Asians did not predict Whites' position on affirmative action policies, *ceteris paribus*. Men and older people were consistently more likely to hold unfavorable views of affirmative action policies, all else being equal ($p<0.05$).

All in all, symbolic racism and political ideology consistently predicted Whites' attitudes toward affirmative action policies across all model specifications, *ceteris paribus.* In contrast to existing knowledge, neither perceived threat nor principle values explain Whites' views on affirmative action policies, holding all else constant. There is at least partial evidence that legitimizing myths play a role in Whites' opinion on affirmative action policies, all else being equal. Closeness to Blacks was a strong and significant predictor of Whites' views on affirmative action, holding all else constant; controlling for its effects, the model minority stereotype was only marginally significant in explaining Whites' attitudes on affirmative action.

Brant test results for specifications 4 (overall chi2=13.33; p=0.346; df=12) and 5 (overall chi2=13.63; p=0.401; df=13) show no evidence the parallel regression assumption, or proportional odds assumption, was violated.

Table 3.3 White Model: Predictors of Attitudes Toward Affirmative Action (Odds Ratios)

DV: Affirmative Action	(1)	(2)	(3)	(4)	(5)
Independent Vars:					
Realistic Group Conflict					
Asian Threat	1.11 (.22)	1.22 (.25)	1.13 (.24)	1.24 (.28)	1.25 (.28)
Black Threat	0.88 (.18)	0.86 (.19)	0.85 (.19)	0.81 (.19)	0.84 (.19)
Symbolic Racism	**0.46***(.06)**	**0.43***(.06)**	**0.42***(.06)**	**0.41***(.06)**	**0.42***(.06)**
Political Ideology	**1.32***(.08)**	**1.31***(.08)**	**1.31***(.08)**	**1.30***(.08)**	**1.30***(.08)**
Principle Values	0.86 (.13)	0.88 (.14)	0.86 (.13)	0.89 (.14)	0.87 (.14)
Racial Triangulation					
Superior-Inferior		**0.86**(.05)**		**0.89*(.05)**	0.89†(.05)
Outsider-Insider		1.10 (.08)		1.11 (.09)	1.11 (.09)
Closeness to					
Asians vis-à-vis Blacks			**0.78**(.07)**	0.83†(.08)	
Asians					0.89 (.10)
Blacks					**1.36*(.17)**
Sociodemographic Controls					
Education	**0.86*(.06)**	0.90 (.07)	**0.83*(.06)**	0.87†(.06)	0.86†(.07)
Log Income	0.88 (.07)	0.88 (.08)	0.87 (.07)	0.88 (.07)	0.88 (.08)
Age	**0.99*(.004)**	**0.99*(.005)**	0.99†(.005)	**0.99*(.005)**	**0.99*(.005)**
Gender (Male=1)	**0.65**(.09)**	**0.65**(.10)**	**0.68*(.11)**	**0.68*(.11)**	**0.68*(.11)**
Constant					
Cut1	-4.89 (1.08)	-4.78 (1.19)	-5.38 (1.16)	-4.99 (1.24)	-4.42 (1.30)
Cut2	-4.35 (1.07)	-4.28 (1.19)	-4.90 (1.15)	-4.53 (1.24)	-3.97 (1.29)
Observations	*N*=864	*N*=807	*N*=775	*N*=738	*N*=738
Pseudo R-Squared	0.09	0.10	0.10	0.11	0.11

Note: Estimated using ordinal logistic regression (OLR); odds ratios presented; standard errors in parentheses
†p<0.10; * p<0.05; ** p<0.01; *** p<0.001

Figure 3.4 plots the predicted probabilities of non-prejudiced (symbolic racism=2), politically-moderate Whites expressing more favorable views on affirmative action policies as they move along the Asian-Black closeness continuum. It shows that the closer Whites moved towards Asians vis-à-vis Blacks, the more likely they were to say affirmative action policies were bad and the less likely they were to say affirmative action was good. There was no change in the probability of answering neither good nor bad as the relative closeness ratings changed. However, the probability of Whites saying affirmative action was good was still higher than the

probability of them saying it was bad, even as Whites were feeling closer to Asians than to Blacks by 3 points on the relative closeness scale.

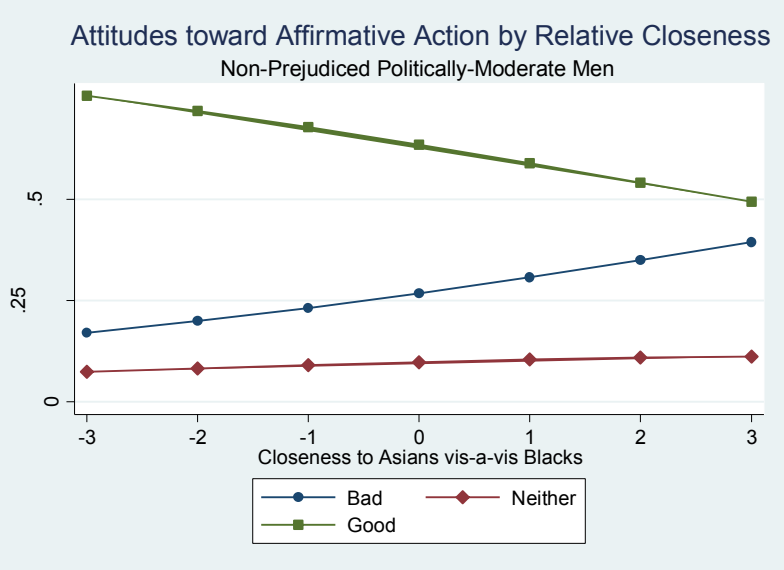


Figure 3.4 Predicted Probabilities of More Favorable Views on Affirmative Action

Table 3.4 displays the results for the Asian model. Again, ordinal logistic regressions were used to estimate the parameters and odds ratios are presented. Only symbolic racism and political ideology consistenly predicted Asians' attitudes toward affirmative action policies, holding all else constant. Specifically, a unit increase in racial resentment towards Blacks decreased the odds of being supportive towards affirmative action policies versus being neutral or opposed by a factor of 0.49-0.51, ceteris paribus ($p<0.001$). The more Asians identified as being politically liberal, the greater the odds of them holding more favorable views toward affirmative action, all else being equal ($p<0.05$). Similar to the White model, perceived threat did not predict Asians' attitudes toward affirmative action policies. The odds of Asians expressing more favorable views on affirmative action decreased as Asians identified more with Whites vis-à-vis Blacks, *ceteris paribus* ($p<0.10$). However, once the foreigner stereotype was accounted for in the model, the relative closeness scale was no longer significant. The odds of Asians being more supportive of affirmative action policies increased as they felt more marginalized by the foreigner stereotype ($p<0.10$). In contrast to the findings in the White model, the absolute closeness measures of Asians toward Whites and Blacks, respectively, were not associated with Asians' attitudes toward affirmative action.

Unfortunately, Brant test results for specifications 4 (overall chi2=25.44; p=0.02; df=13) and 5 (overall chi2=25.38; p=0.03; df=14) suggest the parallel regression assumption may be violated.

Table 3.4 Asian Model: Predictors of Attitudes Toward Affirmative Action (Odds Ratios)

DV: Affirmative Action	(1)	(2)	(3)	(4)	(5)
Independent Vars:					
Realistic Group Conflict					
White Threat	1.23 (.19)	1.31†(.21)	1.16 (.18)	1.22 (.20)	1.23 (.20)
Black Threat	1.15 (.19)	1.12 (.19)	1.19 (.21)	1.15 (.21)	1.14 (.21)
Symbolic Racism	**0.51***(.09)**	**0.50***(.09)**	**0.51***(.09)**	**0.49***(.09)**	**0.49***(.09)**
Political Ideology	**1.22*(.10)**	**1.24*(.11)**	**1.21*(.10)**	**1.25*(.11)**	**1.24*(.11)**
Principle Values	0.96 (.19)	1.01 (.21)	0.99 (.19)	1.04 (.21)	1.03 (.21)
Racial Triangulation					
Superior-Inferior		0.91 (.06)		0.91 (.06)	0.92 (.07)
Outsider-Insider		1.15 (.11)		1.19†(.12)	1.19†(.12)
Closeness to					
Whites vis-à-vis Blacks			0.83†(.09)	0.85 (.10)	
Whites					0.89 (.14)
Blacks					1.22 (.17)
Sociodemographic Controls					
Education	1.02 (.10)	1.07 (.12)	1.04 (.11)	1.09 (.12)	1.09 (.12)
Log Income	1.02 (.11)	0.99 (.11)	1.02 (.11)	1.00 (.12)	1.00 (.12)
Age	1.00 (.01)	1.01 (.01)	1.00 (.01)	1.01 (.01)	1.01 (.01)
Gender (Male=1)	0.83 (.16)	0.76 (.16)	0.87 (.17)	0.78 (.17)	0.78 (.17)
Foreign Born	0.66†(.16)	0.75 (.19)	0.69 (.18)	0.78 (.21)	0.78 (.21)
Constant					
Cut1	-1.52 (1.38)	-1.19 (1.54)	-1.49 (1.42)	-0.96 (1.58)	-0.75 (1.64)
Cut2	-0.77 (1.38)	-0.45 (1.54)	-0.79 (1.42)	-0.28 (1.58)	-0.07 (1.64)
Observations	*N*=468	*N*=443	*N*=451	*N*=429	*N*=429
Pseudo R-Squared	0.05	0.06	0.05	0.06	0.06

Note: Estimated using ordinal logistic regression (OLR); odds ratios presented; standard errors in parentheses
†p<0.10; * p<0.05; ** p<0.01; *** p<0.001

Lastly, Table 3.5 displays the results for the Black model. Interestingly, even for Blacks, symbolic racism was a consistently significant predictor in explaining Blacks' attitudes toward affirmative action policies. The more Blacks internalized the negative images of their own racial group as being too demanding, unmotivated and undeserving, the greater the odds of them showing unfavorable views on affirmative action policies, all else being equal (p<0.001). Again, Blacks who were politically liberal had greater odds of showing more supportive stances on

affirmative action, *ceteris paribus* (p<0.01). Counterintuitively, however, the more threat Blacks felt from Whites, the greater the odds of them showing less support for affirmative action policies, all else being equal (p<0.05). The racial triangulation variables were not significant in predicting Blacks' attitudes toward affirmative action. Nor were the absolute closenesss scales. However, the relative closenss scales were marginally significant in predicting Blacks' views on affirmative action. That is, the closer Blacks moved towards Asians vis-à-vis Whites on the relative closeness scale, the greater the odds of them expressing more supportive views on affirmative action, holding all constant (p<0.10). Like the Asian model, Brant test results for specifications 4 (overall chi2=27.09; p=0.007; df=12) and 5 (overall chi2=30.14; p=0.004; df=13) imply the parallel regression assumption may be violated.

Table 3.5 Black Model: Predictors of Attitudes Toward Affirmative Action (Odds Ratios)

DV: Affirmative Action	(1)	(2)	(3)	(4)	(5)
Independent Vars:					
Realistic Group Conflict					
Asian Threat	1.00 (.13)	1.00 (.14)	0.98 (.14)	1.00 (.14)	1.00 (.15)
White Threat	**0.70**(.09)**	**0.65**(.09)**	**0.69**(.10)**	**0.64**(.09)**	**0.64**(.09)**
Symbolic Racism	**0.44***(.08)**	**0.40***(.07)**	**0.43***(.08)**	**0.40***(.08)**	**0.41***(.08)**
Political Ideology	**1.28**(.11)**	**1.31**(.11)**	**1.31**(.11)**	**1.33**(.12)**	**1.33**(.12)**
Principle Values	0.87 (.16)	0.86 (.16)	0.81 (.16)	0.82 (.16)	0.81 (.16)
Racial Triangulation					
Superior-Inferior		1.08 (.07)		1.10 (.07)	1.09 (.07)
Outsider-Insider		1.11 (.13)		1.12 (.13)	1.12 (.13)
Closeness to					
Asians vis-à-vis Whites			1.17 (.13)	1.23†(.14)	
Asians					1.21 (.16)
Whites					0.79 (.12)
Sociodemographic Controls					
Education	1.15 (.12)	1.11 (.12)	1.12 (.12)	1.09 (.12)	1.09 (.12)
Log Income	1.03 (.11)	1.03 (.11)	1.05 (.11)	1.06 (.12)	1.06 (.12)
Age	1.00 (.01)	1.01 (.01)	1.00 (.01)	1.00 (.01)	1.01 (.01)
Gender (Male=1)	1.35 (.30)	1.33 (.31)	1.37 (.31)	1.39 (.33)	1.40 (.33)
Constant					
Cut1	-3.58 (1.36)	-3.52 (1.45)	-3.82 (1.39)	-3.57 (1.47)	-3.66 (1.52)
Cut2	-2.86 (1.35)	-2.85 (1.44)	-3.13 (1.38)	-2.91 (1.47)	-3.00 (1.51)
Observations	*N*=693	*N*=656	*N*=665	*N*=632	*N*=632
Pseudo R-Squared	0.07	0.08	0.08	0.08	0.08

Note: Estimated using ordinal logistic regression (OLR); odds ratios presented; standard errors in parentheses
†p<0.10; * p<0.05; ** p<0.01; *** p<0.001

DISCUSSION & CONCLUSION

Across all three models, symbolic racism and political ideology were the most consistent and salient predictors of people's opinions on affirmative action policies. Contrary to existing research, perceived threat did not predict Whites' nor Asians' views on affirmative action. For Blacks, only perceived threat from Whites were associated with their attitudes toward affirmative action policies, and the direction of the relationship is rather counterintuitive: The more Whites presented a threat to Blacks, the less likely Blacks were to have supportive views of affirmative action policies. Also, adherence to principle American values did not help explain attitudes toward affirmative action.

The current study finds partial support for the role of legitimizing myths in explaining attitudes toward affirmative action. The more Whites endorsed the view that Asians were harder working than Blacks, the less likely they were to express supportive views on affirmative action policies. The associations were significant even after controlling for the effects of symbolic racism and political ideology. As for Asians, the more aware they were of their outsider status, the more supportive they were of affirmative action policies. Although the association was only marginally significant, substantively, it suggests possibilities for empathizing with Blacks and prospects for coalition-building among marginalized groups. However, racial triangulation did not explain Blacks' views on affirmative action policies.

It is interesting to see that the superior-inferior dimension is only associated with Whites' policy attitudes and not those of minority groups. Connecting back to my arguments on group position and legitimizing myths, a possible explanation is that the hardworking stereotypes are evoked as a justification for opposing affirmative action policies by Whites, whereas minority groups do not necessarily share this rationalization by the dominant group. Rather, Asians were drawn closer to supporting affirmative action when they internalized the foreigner stereotype, which, according to racial triangulation theory, is created to keep Asians excluded from full civic participation and gaining sociopolitical influence.

Closeness to Blacks was a strong predictor for Whites' supportive views on affirmative action policies. For minority groups, however, the relative outgroup identification scale did a better job of predicting minority stance on affirmative action policies. The closer Asians or

Blacks moved towards Whites vis-à-vis the other racial outgroup, the less likely they were to be supportive of affirmative action policies, *ceteris* paribus.

Important limitations to note for both Chapters 2 and 3 are that given the available data the model minority and perpetual foreigner stereotypes were imperfectly operationalized; that the significant relationship between the racial triangulation beliefs and the study outcomes of interracial closeness and racial policy attitudes still remained small in terms of effect size; and that causation could not be established from the cross-sectional analyses—only association could be inferred. Therefore, in the future, better and more accurate measures need to be developed for the racial triangulation stereotypes. For instance, the model minority stereotype consists of perceptions about Asians' intelligence as well as their work ethics. However, due to what was available in the NPS, the dissertation models only the hardworking stereotypes of Asians vis-à-vis other groups. Also, since the coefficient sizes of the racial triangulation variables appear to be small in both Chapters 2 and 3, further analyses about their effect sizes and applicability to policy need to be conducted. Lastly, future research should look into designs that can capture the causal nature between stereotype-switching (e.g., from model minority to perpetual foreigner) and changes in interracial closeness or racial policy attitudes.

Chapter 4

Adult Perceptions, Children's Psychological State, and Academic Achievement: An Exploratory Study of the Racial and Ethnic Differences in the Relationship

INTRODUCTION

The racial and ethnic achievement gap continues to exist, as noted by national reports, even after several decades of governmental data collection, research, and policy interventions (Aud, Fox, & KewalRamani, 2010; Annie E. Casey Foundation, 2014; Hanushek, 2016). Overall, Asians and Whites have shown higher academic achievement and educational attainment than Blacks or Hispanics[24]. According to the 2015 National Assessment of Educational Progress (NAEP), a nationally representative assessment of the reading and math performance of U.S. 4th, 8th, and 12th graders administered by the federal government every two to four years, 57 percent of Asian and 46 percent of White fourth graders scored at or above the "proficient" level in reading, out of the three possible levels of "basic," "proficient," and "advanced"; while only 18 percent of Black and 21 percent of Hispanic fourth graders scored at or above this level (NCES, 2015). As for math achievement, the 2015 NAEP shows that 65 percent of Asian and 51 percent of White fourth graders scored at or above the "proficient" level but only 19 percent of Black and 26 percent of Hispanic students achieved the same level (NCES, 2015). The statistics were similar for 8th grade reading and math achievement.

Consistent patterns of the racial/ethnic achievement gap are particularly concerning since they extend to disparities in postsecondary educational attainment, earnings, and employment opportunities (Annie E. Casey Foundation, 2014; APA, 2012; Hanushek, 2016). Studies find that higher levels of education were associated with higher median income and lower unemployment rates across race and gender (Aud et al., 2010). For instance, the National

[24] Although Hispanic is an ethnicity and not a race, it is included in the comparisons as a separate group due to its increasing significance in the U.S. demography.

Center for Education Statistics shows that in 2008, 52 percent of Asians, 33 percent of Whites, 20 percent of Blacks, and 13 percent of Hispanics had obtained at least a bachelor's degree; the respective median income for males and females with at least a bachelor's degree were $69,000 and $54,000 for Asians, $71,000 and $50,000 for Whites, $55,000 and $45,000 for Blacks, and $54,000 and $43,000 for Hispanics; and finally, unemployment rates were higher for Blacks and Hispanics at nine and eight percent, respectively, than for Whites and Asians at four percent each (Aud et al., 2010). While each racial and ethnic group has seen educational and occupational gains over the years, the gaps between groups have not narrowed and in some instances have widened (APA, 2012; Aud et al., 2010; Hanushek, 2016).

Various explanations exist for why the racial/ethnic achievement gap persists. Structural explanations focus on the socioeconomic disparities across racial and ethnic groups; the trends in school resegregation; the lack of access to resources, such as bilingual education, quality early education and afterschool programs, and vital information for navigating the education system; and immigrant selectivity, where Asian immigrants on average have higher levels of education than their Latino counterparts due to different immigration trajectories—proportionally more Latino immigrants are admitted to the U.S. for family reunification while relatively more Asian immigrants enter the country via employment in high-skilled professions (APA, 2012; Lee & Zhou, 2014).

On the other hand, cultural explanations attribute the high academic performance and upward social mobility of some racial and ethnic groups, such as Asians and Jews, to the values placed on education, hard work, and success by these groups. Since the mid-1960s, the media and the press began portraying Asian Americans as "model minorities," a minority group that has overcome structural barriers and achieved educational and occupational success via hard work and self-discipline (Aoki & Takeda; Cheng & Thatchenkery, 1997; Tuan, 1999; Zhang & Hong, 2012). Recently, Amy Chua and the mainstream media revived the model minority frame with Chua's book releases (2011, 2014), linking the high educational and socioeconomic outcomes of Asian Americans with ethnic-specific parenting styles and the cultural traits of greater work ethic, self-reliance, perseverance, delayed gratification, and family cohesiveness (Lee & Zhou, 2014). A recent study finds empirical support for the cultural explanation even after controlling for key factors from alternative explanations, such as sociodemographic characteristics and cognitive ability (Hsin & Xie, 2014). The argument is that Asian students

perform better on tests than their White counterparts because they put in more effort and are more motivated based on their beliefs that cognitive abilities can be obtained through hard work and on their status as immigrants with limited channels for upward mobility (Hsin & Xie, 2014).

However, cultural beliefs and values are constantly shaped and revised in response to the socioeconomic and political conditions surrounding the ethnic and racial groups. As Lee (2012) points out, "it's not that some groups *value* [emphasis in original] education more than others (the essentialist interpretation of culture)" but that the meaning and expectations of "good education" differ across groups depending on what is realistically conceivable and attainable given the group's average socioeconomic status and available resources, including the existence of role models. Prior to the Immigration and Nationality Act of 1965, most Asian immigrants worked in menial jobs and did not arrive in the U.S. with high human capital. Hence, they were considered the "illiterate, undesirable, and unassimilable immigrants" (Lee & Zhou, 2014, p.8) and were socially ostracized, residentially segregated, and barred from naturalization (Okihiro, 1994). It was not until after 1965, when Asians with higher education entered the country to fill in high-skilled positions, that Asian Americans started being associated with the cultural traits of the model minority. Moreover, in countries such as Spain, which have a more closed opportunity structure for minorities than the U.S., the children of Asian immigrants preferred entrepreneurship to a college or university degree and had the lowest educational aspirations of all second-generation minority groups (Yiu, 2011). Hence, if Asian Americans have higher educational and occupational expectations and are able to put more effort toward fulfilling them than other minorities, it is not because they are "Asian" per se but rather because a different incentive structure exists for Asians vis-à-vis other minorities in the U.S.

This chapter focuses on how teachers' evaluation of children and parents' educational expectations influence children's self-efficacy and internalizing behaviors, which in turn affect their academic achievement. The present study further explores whether there are racial and ethnic differences in each of the predictors of academic achievement and if the associations between the predictors and achievement vary by race and ethnicity. The theoretical frameworks guiding this chapter are stereotype promise and stereotype threat, which explain how racial stereotypes impact children's academic performance. While this chapter does not explicitly test the effects of racial/ethnic stereotypes on the relationship between academic achievement and the study predictors, stereotype promise and stereotype threat provide plausible explanations for the

presence of any racial/ethnic differences in the analyses of the study. Among the four racial and ethnic groups examined, the study is primarily interested in the differences in pattern between Asians and Blacks. A longitudinal repeated measures analysis is run given that the same children were observed repeatedly over three time points. Policy and practice implications are discussed in the final section.

BACKGROUND

Theoretical Framework: Stereotype Threat and Stereotype Promise

In explaining the achievement gap, conventional theories have assumed genetic or cultural differences across racial and ethnic groups (Chua & Rubenfeld, 2014; Duckworth & Seligman, 2005; Herstein & Murray, 1994; Hsin & Xie, 2014; Kristof, 2006; Moffitt et al., 2011; Murray, 2012; Portes & Zhou, 1993). However, both the genetics and cultural hypotheses have been criticized for being supremacist, blaming minorities for their own failures, and pitting groups against each other (Zhou & Lee, 2014). Instead, several studies have shown the social and psychological aspects of the achievement gap.

Studies have found that racial stereotypes can have a real impact on the academic performances of Asian and Black students (Lee & Zhou, 2014; Steele & Aronson, 1995; Steele, 2010). When students were told the standardized tests measured intellectual ability, Black students scored lower on the tests than their White counterparts; however, when they were described as non-diagnostic of ability, Blacks performed as well as Whites (Steele & Aronson, 1995; Steele, 2010). Subsequent experiments found that the psychological pressure—the anxiety and fear—of confirming the negative racial stereotypes distracted Black students from focusing on the tests, leading to lower performance; additionally, merely asking the race of students on the test form was sufficient in activating the Black students' consciousness about the negative stereotypes associated with their race (Steele & Aronson, 1995; Steele, 2010). In sum, pervasive, negative racial stereotypes can act as a "threat" to Blacks, hurting their self-efficacy, confidence, and task performance—hence the term "stereotype threat."[25]

[25] The concept has been extended to test the impact of gender stereotypes on female math achievement (Spencer, Steele, & Quinn, 1999) and of White-Black stereotypes on athletic performance (Stone et al., 1999). The studies have found support for the theory of stereotype threat, demonstrating that it works with any identity group with a prevalent negative stereotype.

Based on the theory of stereotype threat, Lee and Zhou (2014) developed the theory of stereotype promise to explain the high academic performance of Asians. Stereotype promise is defined as "the promise of being viewed through the lens of a positive stereotype, which, in turn, can enhance the performance of Asian American students" (p. 9). Studies have consistently found that teachers and administrators tend to be positively biased toward Asian students, perceiving them as intelligent, hardworking, better-prepared, and more motivated toward school work (Hsin & Xie, 2014; Jiménez & Horowitz 2013; Lee, 2009). Such positive perceptions of Asian students can lead to actual results, such as good grades, help with coursework and college applications, and placements in Honors and Advanced Placement (AP) tracks; in more than a few cases, teachers and administrators assumed Asian students were smart and did not require placement tests for these students to enter AP tracks, allowing those with average to low grades in competitive programs and tracks—an advantage that is not easily given to other minority students (Lee, 2009; Lee & Zhou, 2014). As such, teachers' positive perceptions and expectations function as symbolic capital for Asian students, who are then motivated to work harder to meet up to the higher expectations placed on them, ultimately enhancing their academic performance; that is, stereotype promise becomes a self-fulfilling prophecy for Asian Americans (Lee & Zhou, 2014).

Considering the theories of stereotype threat and promise, the present study will examine two psychological factors known to influence academic achievement: self-efficacy and internalizing problems (Hancock, 2001; Oludipe, 2009; Owens et al., 2012; Pintrich, 2003; Schunk & Hanson, 1985; Schunk, 1989). Studies have also found that teachers' and parents' expectations are associated with not only academic achievement but also children's self-perceptions and expectations (Benner & Mistry, 2007; Bouchey & Harter, 2005; Howard, 2003; McKown and Weinstein, 2008). Therefore, a mediation model is proposed where the effects of teachers' evaluation and parents' educational expectations of children on academic achievement are mediated by children's self-efficacy and internalizing problems.

Because there are no direct measures of racial/ethnic stereotypes in the study, it is presumed based on existing research and the theories of stereotype threat and promise that racial/ethnic stereotypes bias teachers' evaluation and expectations of students and shape parental expectations; also, the self-efficacy and internalizing behaviors of children are expected to vary across racial and ethnic groups given the stereotypes and perceptions of society. The

study further explores whether the effects of the predictors on achievement vary by race and ethnicity.

Self-Efficacy, Internalizing Behaviors, and the Achievement Gap

Self-efficacy is defined as people's perceptions and judgments of their capabilities to perform and accomplish a particular task (Bandura, 1977, 1986; Schunk, 1991). Individuals who perceived themselves as efficacious or capable were more likely to participate in tasks, work harder, and persist longer than those who had self-doubt (Bandura, 1977). Applying the concept to student academic achievement, studies found that students who were more confident in their learning capacity and who expected to do well were more active in the learning process, put in more effort and time, and performed better on tests (Pintrich, 2003; Schunk & Hanson, 1985; Schunk, 1989). Individuals cultivate self-efficacy from four sources: their accomplishments, observing others' accomplishments, others' evaluation of their performance, and their physiological reactions to performing the task (Bandura, 1977). This study will examine how others' evaluations and expectations (i.e., teachers and parents) motivate children to perform well on math and reading tests.

Compared to externalizing problem behaviors, internalizing behaviors have received less attention due to their relative invisibility and children's inability to express internal distress (Tandon, Cardeli, & Luby, 2009). However, studies have consistently found that internalizing problems, such as test anxiety and depression, are associated with lower academic performance (Gaudry & Spielberger, 1971; Hancock, 2001; Oludipe, 2009; Owens et al., 2012; Rana & Mahmood, 2010). Test anxiety has two dimensions: the affective dimension involves physical reactions to tests, such as fear and nervousness, while the cognitive dimension is primarily concerned with the worry students have about taking tests and doing poorly on them; worry contributed more to test anxiety and low academic performance than did affective factors (Hancock, 2001; Pintrich & Schunk, 1996; Rana & Mahmood, 2010; Williams, 1994). While all students showed lower academic performance and less motivation when exposed to highly evaluative classroom environments (i.e., threat of evaluation), those with high anxiety levels suffered the most (Hancock, 2001). Research also finds that females generally have higher test anxiety than males (Bandalos et al., 1995; Cassady & Johnson, 2002; Chapell et al., 2005).

In the following sections, parent and teacher expectations, both of which are known to affect children's self-perceptions and expectations, will be reviewed (Astone & McLanahan, 1991; Benner & Mistry, 2007; Goyette & Xie, 1999; Jodl et al., 2001; Mau & Bikos, 2000; Muller et al., 1999; Wilson & Wilson, 1992).

Teachers' Perceptions and the Achievement Gap

Teachers and administrators are important agents who create the climate of the school; the school environment can help some students thrive academically but can also threaten the identity and growth of others. Existing research point to evidence that racial/ethnic stereotypes and bias may influence the way teachers perceive and react to student learning attitudes and classroom behavior. Researchers found that White teachers were harsher in their assessments of minority students' attitudes toward learning and classroom problem behaviors than minority teachers. White teachers rated Black and Hispanic students as less attentive and exhibiting more externalizing behaviors than White students (Dee, 2005; Downey & Pribesh, 2004; McGrady & Reynolds, 2013); but when the race of the teacher and student matched, ratings on attentiveness and externalizing problem behaviors were less negative—this tendency was especially salient for Black students (Dee, 2005; Downey & Pribesh, 2004; Wright, 2015).

Furthermore, Blacks students were three times more likely to experience school discipline than Whites (Losen et al., 2015). In school environments that promote White, middle-class values and standards of learning, there exist racial gaps in disciplinary outcomes, where White students are more likely to receive discipline for objective offenses, such as possession of lethal weapons or physical altercations, while Black students are more likely to be punished for behaviors that involve subjective interpretations, such as being defiant, too loud, and disrespectful (Boykin, Tyler, & Miller, 2005; Gregory & Weinstein, 2008; Morris, 2005; Skiba et al., 2002).

Also, from the Early Childhood Longitudinal Study-Kindergarten Cohort of 1998 (ECLS-K), Ouazad (2014) found that teachers rated students of the same race and ethnicity more positively in math and reading, even after accounting for students' objective performances. Findings from another national data set, the National Education Longitudinal Study (NELS), showed that compared to Hispanic and Black teachers, White teachers underestimated Hispanic and Black students' ability to work hard and their chances for entering college (Ehrenberg,

Goldhaber, and Brewer, 1995); they also held lower educational expectations for these racial and ethnic minority students than Hispanic and Black teachers did for students of their own race and ethnicity (Gershenson, Holt, & Papageorge, 2015).

Research further shows that teacher bias translates into actual student performance differences along racial and ethnic lines. Dee (2004) found that students with teachers of the same race did better on math and reading tests than students with teachers of a different race. McKown and Weinstein (2008), on the other hand, estimated that differential treatment of children with comparable academic ability by teachers accounted for approximately a third of a standard deviation of the racial/ethnic differences in educational achievement in an academic year. One mechanism through which teachers' expectations influenced academic achievement was by shaping children's self-perceptions (Muller et al., 1999; Wilson & Wilson, 1992; Lee & Zhou, 2014). For instance, low teacher expectations harmed both the academic self-efficacy and achievement of Black students (Howard, 2003); whereas high teacher expectations helped boost the self-perceptions and performance of Asian students (Lee & Zhou, 2014).

Parental Expectations and the Achievement Gap

Considerable research has been conducted on the relationship between parental expectations and children's academic achievement. High parental expectations were linked to higher school grades and standardized test scores; greater persistence, motivation, and academic resilience in children; and aspirations for higher education (Davis-Kean, 2005; Hossler & Stage 1992; Pearce, 2006; Peng & Wright, 1994; Reynolds, 1998; Vartanian et al. 2007). With respect to racial and ethnic differences, Asian American parents held higher educational expectations than parents of other races, even after controlling for socioeconomic status (Chen and Stevenson, 1995; Glick & White, 2004; Hao & Bonstead-Burns, 1998; Mau, 1997; Okagaki & Frensch, 1998; Peng & Wright, 1994; Suizzo & Stapleton, 2007; Sy et al., 2005; Vartanian, et al., 2007). While findings were less consistent for Hispanic and Black parents, research shows they also have higher academic expectations for their children than White parents (Glick & White, 2004; Hao & Bonstead-Burns, 1998; Suizzo & Stapleton, 2007).

Studies have suggested that the differences in parental expectations may be due to the differences in cultural perceptions of the relationship between effort, ability, and achievement. Asian American parents and East Asian parents, internationally, were more likely to view

academic achievement as a result of hard work than innate ability compared to White parents (Chen and Stevenson, 1995; Holloway, 1988; Okagaki & Frensch, 1998; Stevenson & Stigler, 1992). Based on this belief, Chua (2011) attributed the academic success of Asian children to the existence of "Tiger Parents," a term she coined to refer to Asian parents who are strict, demanding, and willing to push their children to work hard so that they can reach their full potential. Amid the controversy generated by Chua's argument, a recent study found that contrary to Chua's claim, "Tiger Parenting" was not the most common form of parenting among Chinese Americans, nor did it produce the best developmental outcomes for children, which included academic as well as socioemotional adjustment (Kim et al., 2013). Black parents, on the other hand, had relatively high parental expectations given their children's actual academic performance; scholars argue this is due to the distrust and doubt Black parents have about the education system and fairness of teacher evaluations (Lareau & Horvat, 1999; Ogbu, 2003; Yamamoto, Y., & Holloway, S.D., 2010).

While higher educational expectations of Asian parents could be based on cultural values, it could also be the case that given the way Asians are racialized in the U.S. social hierarchy, the most viable route to achieving socioeconomic mobility for Asians is obtaining higher education. Sue and Okazaki (1990) have proposed the concept of relative functionalism as an alternative explanation to the cultural hypothesis of Asian American educational success. According to relative functionalism, Asian Americans invest in education based on the belief that it is the best path to economic upward mobility; this belief comes from past experiences of discrimination and restricted upward mobility in professions that do not necessarily require higher education, such as entertainment, politics, and sports (Sue & Okazaki, 1990). Also, studies find that limited socioeconomic resources and immigrant status are tied to lower parental self-efficacy and expectations; for instance, Latino immigrant parents reported lower self-efficacy and expectations for their children than their Asian counterparts, as the former group generally lacked the community resources to support their children's education while the latter benefited from the existence of well-established co-ethnic communities (Garcia Coll & Marks, 2009; Portes & Fernandez-Kelly, 2008).

Finally, there is evidence that children's self-efficacy mediates the relationship between parental expectations and academic achievement. Children assess their capabilities and practical academic expectations based on the cues they receive from parents and teachers (Schunk,

1991). High parental expectations were found to elevate White, Black, and Hispanic children's self-perceptions and competency, which in turn enhanced their academic performance (Benner & Mistry, 2007; Goodenow, 1993; Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001). However, less is known about the mediating role of self-efficacy among Asian Americans (Yamamoto & Holloway, 2010); one study finds that self-efficacy was not as important as the fear of failure in explaining the academic performance of Asian children (Eaton & Dembo, 1997).

Other Predictors of the Achievement Gap

Other factors known to be associated with academic achievement are the socioeconomic, marital, and immigrant status of parents and their involvement in the education of their children. Children from low-income families have consistently performed more poorly on tests than their counterparts from high-income families; this gap in achievement has grown wider in the past three decades (Brooks-Gunn & Duncan, 1997; Reardon, 2011). Also, children from two-parent families had higher scores than children from other family structures (Peng & Wright, 1994; Portes & Fernandez-Kelly, 2008).

Findings on immigrant families are mixed. While some studies found that foreign-born students outperformed their native-born counterparts in reading and math tests (Fuligni, 1997; Schwartz & Stiefel, 2006), others found that among children from immigrant families, foreign-born students performed more poorly than native-born students (Kaufman, Chavez, & Lauen, 1998). Differences in achievement patterns for children of immigrant families have been attributed to language barriers, poverty, social capital, and immigrant aspirations (APA, 2012; Fuligni, 1997; Lee & Zhou, 2014; Portes & Zhou, 1993).

Finally, parental involvement, such as communicating and volunteering with the school, participating in school activities, and checking on homework, has been shown to be positively related to children's educational performance (Barnard, 2004; Fan & Chen, 2001; Feuerstein, 2000; Jeynes, 2003; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004).

Differences in Effects by Race and Ethnicity

Extant literature shows that teachers' evaluations, parental expectations, children's self-efficacy and internalizing behaviors are each important for explaining academic achievement.

Also, children's self-perceptions and expectations were found to mediate the association between adult expectations and children's performance. However, it is unclear whether the strength of the relationship between each of these variables and academic achievement remains the same across race and ethnicity. That is, does the same level of change in positive teacher evaluation lead to similar increases in self-efficacy and test scores? Are the effects of self-efficacy and internalizing behaviors on achievement practically the same for all groups? Or, are these variables more effective for some groups than others?

Studies that consider race and ethnicity often focus on one group (e.g., Blacks) or compare the group of interest against Whites (e.g., Asians vs. Whites); the few studies that examine more than two racial and ethnic groups often fail to include Asians (Chen & Stevenson, 1995; Dee, 2005; Downey & Pribesh, 2004; Ellis & Ryan, 2003; Jonson-Reid et al., 2005; Losen et al., 2015; Mau, 1997; McGrady & Reynolds, 2013). This study, therefore, includes Whites, Blacks, Hispanics, and Asians, and is primarily interested in the differences between Asians and Blacks given the theories of stereotype threat and promise.

The study is exploratory since several scenarios[26] are possible for the racial and ethnic differences in the effects of the four predictors on academic achievement. First, the effects may not vary by race or ethnicity (i.e., equal slopes). Racial/ethnic stereotypes can bias the initial levels of the predictors but the effect of each of these predictors on achievement is the same for all racial/ethnic groups. Therefore, there are only constant mean differences in academic achievement across groups due to the initial differences in test scores as well as the differing mean values of the predictors; and the racial/ethnic gap in academic achievement does not widen or shrink with the same level of change in the predictor variable.

Another possibility is that positive teacher ratings and high parental expectations have a greater impact on the self-efficacy of Asians than on the self-efficacy of other races, especially Blacks. The reasoning behind this is that positive teacher and parent responses match the expectations of Asian students given the prevalent model minority stereotype and reinforce Asian children's confidence and motivation to work hard and endure difficulties in the learning process. Black students, on the other hand, are exposed to negative racial stereotypes and have to overcome self-doubt even as positive teacher and parent responses help boost their self-efficacy

[26] The possibilities presented are not exhaustive. Only those that make most sense based on theory are proposed.

and motivation—that is, the effects are mitigated. Similarly, positive teacher and parent responses can be more effective in reducing the internalizing problems of Asians than those of Blacks because it requires more to assuage the fears and worries of Black students who frequently face skepticism from the larger society.

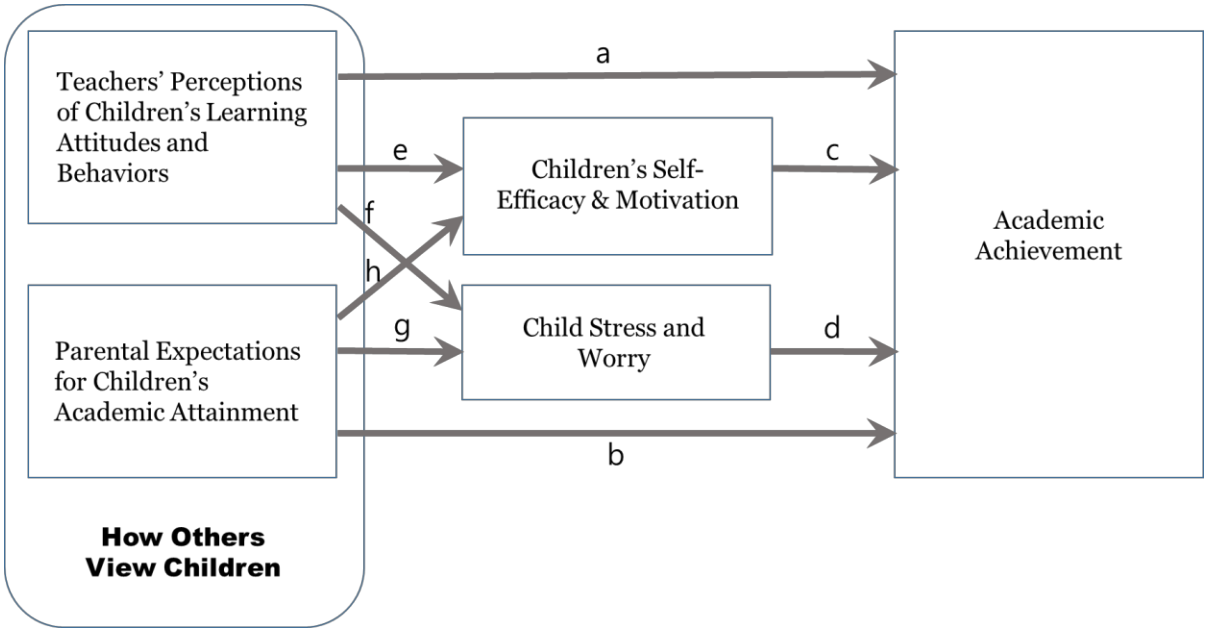
The opposite can also be true. That is, the effects of teacher ratings and parental expectations on self-efficacy and internalizing behaviors could be greater in magnitude for Blacks than Asians. Positive teacher and parent responses will bring bigger gains in self-efficacy and reductions in internalizing behaviors for Black students precisely because they remove the self-doubt and skepticism that undermine self-efficacy and intensify internalizing behaviors.

Lastly, the effects of self-efficacy and internalizing behaviors on achievement may differ between Asians and Blacks. Stereotype threat focuses on the fear and anxiety of Black students that hinder their academic performance; stereotype promise, on the other hand, shows the relationship between self-efficacy and academic achievement. Therefore, the effect of internalizing behaviors on achievement may be greater in magnitude for Blacks—internalizing behaviors are more detrimental to the academic achievement of Blacks; while the relationship between self-efficacy and achievement is stronger for Asians—Asians benefit more academically from self-efficacy than do Blacks.

CONCEPTUAL MODEL AND HYPOTHESES

The present study aims to examine whether 1) Asian children on average show higher academic performance, receive more positive teacher evaluations, have parents who expect more from their children academically, and have higher self-efficacy than their non-Asian peers; 2) the relationship between adult perceptions and children's academic achievement is mediated by children's self-efficacy and internalizing behaviors; and 3) the effects of the four main predictors—teachers' evaluation, parental expectations, and children's self-efficacy and internalizing behaviors—on academic achievement vary across racial and ethnic groups.

Figure. 4.1 Conceptual Model of Children's Academic Achievement



The study tests the following hypotheses:

A. Teachers' favorable evaluation of children's learning attitudes and behaviors is associated with children's positive academic achievement.
B. High parental expectations are associated with positive academic outcomes.
C. Children's self-efficacy and motivation enhance children's academic achievement.
D. Children who are stressed and worried about school tend to have lower academic achievement than their peers who are not stressed and worried.

E. Mediation: Teachers' favorable evaluation of children enhances children's self-efficacy and motivation, which then improves academic outcomes.
F. Mediation: Teachers' favorable evaluation of children reduces the stress and worry children experience from school, which leads to better academic outcomes.
G. Mediation: High parental expectations reduce children's stress and worry about school, positively influencing children's academic achievement.
H. Mediation: High parental expectations motivate children and enhance their self-efficacy, positively influencing children's academic achievement.

I. Racial/Ethnic Differences: Asian students are expected to show higher academic performance; receive more positive teacher evaluations; have parents with higher educational expectations; and have higher self-efficacy than their non-Asian peers.
J. Racial/Ethnic Differences: The effects of teacher evaluation and parental expectations on children's self-efficacy and internalizing behaviors vary by race and ethnicity.
K. Racial/Ethnic Differences: The effects of teacher evaluation, parental expectations, children's self-efficacy, and children's internalizing behaviors on children's academic achievement vary by race and ethnicity.

METHODS

Sample

The current study used a national sample of 10,118 children from Waves 5, 6, and 7 (2002, 2004, 2007) of the Early Childhood Longitudinal Study-Kindergarten Class of 1998 (ECLS-K). ECLS-K is a nationally representative longitudinal study of kindergarten children followed from 1998 to 2007—that is, from when the children entered kindergarten in 1998 to when most of them were in eighth grade. It should be noted that the data are nationally representative of children who attended kindergarten in 1998 and not of all children in the U.S. Data were also collected from the children's teachers, parents, and schools on the children's cognitive, socioemotional, and physical development as well as on the home, school, and classroom environments.

Given the dearth of national data on Asian American children and families, the ECLS-K provides an unparalleled opportunity to conduct analyses on children across all racial and ethnic groups, including Asian Americans (n=540). The study used data from Waves 5 through 7 (third, fifth, and eighth grades) based on the availability and continuity of the study variables. Since each child can have up to three observations, one for each wave, the total sample size is 30,354 observations—for Asians, there are 1,620 observations.

Measures

Dependent Variables

Dependent variables are children's academic achievement on math and reading

measured by the IRT scale scores in waves 5-7 (2002, α=0.95, 0.94[27]; 2004, α=0.95, 0.93; 2007, α=0.92, 0.87) in the ECLS-K data set. The IRT math and reading scores are estimates of the number of items children would correctly answer at each point in time if they were to take all of the math or reading assessment items administered up to and including the current round. It is important to note that the scores are not raw numbers of correct answers but probabilities since the IRT uses the pattern of right, wrong, and omitted responses to estimate the probability of correct answers on all test items. Compared to raw number-right scoring, the IRT is able to reduce the influence of accidental right answers on difficult questions by a low-ability child or of omitted responses by utilizing a consistent pattern of right and wrong answers.

As the scale scores are based on children's performance on the whole set of assessment questions, they are re-estimated in each wave to reflect the expanded set of assessment items. For instance, the scale scores were estimated from test items used in kindergarten through fifth grade in Wave 6 and from kindergarten through eighth grade in Wave 7. Hence, when using IRT scale scores for analysis, the most recent score versions, refreshed with additional assessment items, need to be used for all waves in the analysis. Across all seven waves, there were a total of 212 and 174 questions for reading and math assessments, respectively. The scores can be used in comparing children's overall achievement within and across waves, particularly across subgroups and time.

Independent Variables

There are four independent variables of interest by race for the present study: Teacher Social Rating Scale (SRS), parental academic expectations, children's perceived interest and competence in math and reading, and children's internalizing behavior.

Teacher Social Rating Scale (SRS). In the third and fifth grades (Waves 5 & 6), teachers were asked to rate students' social skills and behaviors on a Likert-type scale of 1 (never) to 4 (very often) on multiple items. Of the five teacher SRS subscales created, this study employs the "Approaches to Learning Scale," which consists of seven items that measure a child's attentiveness ("Pays attention well"), eagerness to learn ("Shows eagerness to learn new things"), organization ("Keeps belongings organized"), flexibility ("Easily adapts to changes in

[27] The first alpha coefficient is for math IRT scores and the second for reading IRT scores.

routine"), task persistence ("Persists in completing tasks"), learning independence ("Works independently"), and rule abidance ("Follows classroom rules"). The scale scores are the mean rating of these seven items. In eighth grade (Wave 7), teachers answered a different set of items on student learning attitudes and behaviors. On a scale of 0 (never) to 4 (all of the time), teachers were asked how often students completed assigned homework; how often they were attentive in math/reading classes; how often they were disruptive in class; and how often they were tardy to class[28]. Just like the "Approaches to Learning Scale," a subscale was created by averaging the ratings on the five items (α=0.80). The last two, disruptiveness and tardiness, were reverse coded so that higher scores on the overall subscale indicated more positive attitudes and behaviors of students. Finally, the scores on the subscales were standardized to a mean of zero and standard deviation of one for all three waves[29].

Parental Academic Expectations. Parents were asked how far they expected their children to go academically across all three waves. The resulting six ordinal categories are "less than high school (=1)," "graduate from high school (=2)," "two or more years of college (=3)," "finish a four- or five-year college degree (=4)," "earn a master's degree or equivalent (=5)," and "finish a Ph.D., M.D., or other advanced degree (=6)." The variable was standardized to deal with multicollinearity due to the inclusion of interaction terms with race.

Perceived Interest and Competence in Math and Reading. Children's self-efficacy and motivation are proxied by children's perceived interest and competence in math or reading. The ECLS-K's Self-Description Questionnaire (SDQ) collects information on children's socioemotional development (i.e., how children perceive themselves socially and academically). As part of the SDQ, children's perceived interest and competence in math and reading are each measured by eight items in third (α=0.90, 0.87[30]) and fifth grades (α=0.92, 0.90) and four items (reduced form) in eighth grade (α=0.89, 0.88) on a scale of 1 (not at all true) to 4 (very true)[31]. The four items across all waves are "I like math/English," "I enjoy doing work in math/reading,"

[28] The item asking how often students were absent from class was dropped from the subscale due to relatively low correlation (alpha) with the rest of the items.

[29] The ECLS-K manual recommends that teacher SRS scores be used as covariates rather than change scores even though all items are the same in the third and fifth grades due to the variability in interpretation of the items by teachers at different points in time.

[30] The first Cronbach's coefficient alpha is for the math scale and the second for the reading scale.

[31] Children's perceived interest and competence in math and reading are adapted from Marsh's (1990) Self-Description Questionnaire.

"Math/English is one of my best subjects," and "I get good grades in math/English." The higher the scores, the stronger are children's perceived interest and competence in math/reading. The original scores represent the mean rating of the items comprising the scale. For the present study, each wave was standardized to a mean of zero and standard deviation of one.

Internalizing Behavior. Children's stress and worry are proxied by children's internalizing behaviors. As part of the SDQ, eight items measure children's perceptions of their internalizing behaviors on a four-point scale of 1 (not at all true) to 4 (very true), such as feeling sad, lonely, ashamed of mistakes, angry when having trouble learning; and worrying about taking tests, doing well in school, finishing work, and having someone to play with at school (α=0.81, 0.79, 0.79[32]). The original scale scores are the mean rating of the items, with higher scores indicating more internalizing problems. For the present study, each wave was standardized to a mean of zero and standard deviation of one.

Race and Ethnicity. The four predictor variables were interacted with race to examine whether there were differences in effects across race. The current study compares four racial and ethnic groups: Whites, Blacks, Hispanics (any race), and Asians. Each group is dummy coded. Other racial and ethnic groups were dropped from the analytic sample, including Native Hawaiians and other Pacific Islanders, American Indians, Alaska Natives, and multiracial groups (*n*=522).

Controls Variables

Demographic characteristics of children and parents and parental involvement were included as controls. Specifically, age is in years for children, mothers, and fathers, where the mean age for each group in 2002 was 9.3 years, 37.6 years, and 40.1 years, respectively. Children's gender equals 1 if male and 0 if female. For each wave, parents' marital status equals 1 if they were married and 0 if they were either separated, divorced, widowed, or never married. Parents' SES is a composite variable provided by the ECLS-K across all three waves, which is computed at the household level using information on the fathers' and mothers' education, fathers' and mothers' occupation, and household income. It is standardized to a mean of zero and standard deviation of one. Parents' immigration status is coded as 1 if both parents were born

[32] Cronbach's coefficient alpha for 2002, 2004, and 2007, respectively

outside of the U.S. (approximately 10%) and 0 otherwise.

Three measures were used for parental involvement. First, *parental involvement at school* consists of seven items, including attending an open house, parent-teacher meeting, conference, class event; volunteering or serving on a committee; participating in a fundraising; and talking to other parents in child's class on a regular basis (α=0.63, 0.61, 0.73[33]). Next, *helping children with homework* has two items asking how often parents help their children with reading and math assignments (α=0.80, 0.77, 0.73). Lastly, *TV rules* includes four items on whether there are rules on what programs children can watch, how early or late they can watch TV, how many hours on weekdays they may watch TV, and how many hours in total per week they can watch TV (α=0.65, 0.65, 0.69). Each of the three scales was created by standardizing the items in the scale to a mean of 0 and standard deviation of 1. Reliability coefficients for parental involvement were similar to those found in prior research (Sun, 2015).

Analysis Plan

Descriptive statistics including the means, standard deviations, and range are presented. The first table shows the unweighted summary statistics of the study variables using the original data (*m*=0). The second table compares the mean values of the main explanatory and dependent variables between Asians and the other racial and ethnic groups using the original data[34]. Here, a longitudinal survey weight (C567PW0) for Waves 5 through 7 was applied to account for sampling design, particularly for the oversampling of Asians, and 90 replicate weights (C567PW1-C567PW90) were used in the paired jackknife replication method to estimate the standard errors of survey estimates.

Hierarchical Linear Modeling (Longitudinal Repeated Measures Analysis)

The current study used three waves of data, spanning five years from 2002 to 2007.

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[33] Cronbach's coefficient alpha for 2002, 2004, and 2007, respectively.

[34] Original data were used because the jackknife method of variance estimation using replicate longitudinal weights did not work with imputed data in STATA 14. Since the data in the ECLS-K were collected using a complex survey design, I initially attempted to weight the data to reduce bias in the analyses. However, because STATA 14 did not allow jackknife replications with imputed data and running multilevel analyses with weighted data had its own complications, I decided against using weights in this study.

Since the same children were observed repeatedly over the three time points, each child had up to three observations and it was highly likely that these observations were correlated and nested within individual children (Luke, 2004). Thus, a hierarchical linear model[35] (HLM) with a random intercept was run on STATA 14 (*xtmixed* command) to account for the correlations among observations for the same child and to adjust the standard errors of the regression coefficients accordingly. As noted by Delva et al. (2010), if data are truly clustered, OLS tends to underestimate the standard errors, increasing the likelihood of a Type I error (false positive), whereas HLM adjusts the standard errors to an appropriate size.

HLM typically has two levels and separately estimates the residuals at Level 1 and Level 2. Level 1 accounts for the individual-level variance *within* groups (i.e., within individual children) and includes time-varying variables, such as the age of the child and teacher's evaluation of the child over time. Level 2, on the other hand, accounts for the group-level variance *between* groups (i.e., between children). Level 2 variables do not change over time but show the differences between individual children, such as gender and immigrant status. By estimating the residuals separately for Levels 1 and 2, the researcher is able to identify how much of the variability in the outcome variable (i.e., the academic achievement of children) is attributable to individual-level factors (observations) versus group-level factors (child as a whole over time).

The current model specification also allowed for random variations in the intercept by child clusters. A random-intercept model shows whether individual children have different starting points with respect to academic performance (i.e., math and reading scores). It also tells us whether the differences in test scores between children later in time could be attributed to the differing starting points on these tests.

The Level-1 model specification is as follows:

$$Y_{it} = \pi_{0i} + \sum_{j=1}^{2} \alpha_{ji} T_{ij} + \sum_{j=1}^{4} \beta_{ji} \left(X_j\right)_{it} + \sum_{k=1}^{3} \delta_{ki} (R_k)_i + \sum_{j=1}^{4} \sum_{k=1}^{3} \theta_{jki} \left(X_j\right)_{it} (R_k)_i + \sum_{j=1}^{10} \mu_{j,i} \left(C_j\right)_{it} + \epsilon_{it}$$

Y_{it} represents the math or reading score of individual child i at time t. T_{ij} are the year dummy variables for individual child i, where the base year is 2002; 2004 is (j=1); and

[35] A hierarchical linear model has other names that can be used interchangeably, such as the multilevel model or longitudinal repeated measures analysis.

2007 is (*j*=2). $(X_j)_{it}$ are the time-varying predictors for individual child i at time t, where (*j*=1) refers to teachers' social rating scale, (*j*=2) to parental expectations, (*j*=3) to children's perceived interest and competence in math (or reading), and (*j*=4) to children's internalizing problems (all variables are standardized to a mean of 0 and standard deviation of 1). $(R_k)_i$ are the race dummy variables for individual child i, where Asians are the reference category, and Whites are (*k*=1), Blacks (*k*=2), and Hispanics (*k*=3). $(C_j)_{it}$ are the time-varying control variables, where child age is (*j*=1), mom age (*j*=2), dad age (*j*=3), marital status (*j*=4), SES of household (*j*=5), parents' involvement at school (*j*=6), parents' help with homework (*j*=7), and parents' rules about watching TV (*j*=8). ϵ_{it} represents the error term that measures the unobserved *within*-subject variance.

The following equation shows the Level-2 model specification:

$$\pi_{0i} = \gamma_{00} + \sum_{j=1}^{2} \gamma_{0j} W_{ji} + u_{0i}$$

Here, W_{ji} represents time-invariant control variables, such as child's gender (*j*=1) and parents' immigrant status (*j*=2). u_{0i} is a random error term that measures the unobserved variance *between* children.

Missing Data

The ECLS-K public-use file contains a high proportion of missing values for the variables in the analytic model. Many of the variables are missing 3 to 64 percent. Conducting a complete case analysis without imputing missing values can lead to a significant loss in power and representativeness due to large amounts of data being dropped via listwise deletion (Little and Rubin, 2002). Moreover, a complete case analysis assumes that data are "missing completely at random" (MCAR)—that is, missingness is completely independent of both the variables in the dataset and unobserved data. However, MCAR is relatively rare and when the assumption does not hold, complete case analysis can lead to biased results.

Running a series of logit models testing whether other variables can predict the missingness of a given variable, I found that missingness on most of the variables in the analytic model could be predicted by one or more of the other variables in the model. Hence, it is likely that the ECLS-K public-use data are "missing at random" (MAR) rather than MCAR. If the data

are MAR, then the probability of missingness depends only on observed data and not on the true values, a less restrictive assumption than MCAR. Under MAR, a complete case analysis can again lead to biased results since the data are not a random sample. Multiple imputation is one way to address this issue as it does not produce biased results under MAR.

Data can also be "missing not at random" (MNAR) if missingness depends on unobserved values of the variable itself, even after accounting for all available observed data. In practice, it is not easy to determine whether missing data are MCAR, MAR, or MNAR. Fortunately, however, maximum likelihood and multiple imputation methods are generally unbiased with all three forms of missing data (Schafer & Graham 2002).

Given ordinal and binary variables in the analytic model, the current study employed multiple imputation using chained equations (MICE) to impute missing values (*mi impute chained* command). MICE does not assume a joint multivariate normal distribution (MVN) but instead uses a conditional distribution appropriate for each variable type (e.g., ordinal, binary, or continuous). While MICE lacks theoretical justification compared to the MVN method, the latter can produce biased estimates when the proportion of missing values is high. MICE estimates have also been shown to be comparable to those of the MVN method (Lee & Carlin, 2010; Van Buuren, 2007).

There are three stages to multiple imputation. The first stage is to fill in the missing values multiple (*m*) times via a random sample of the missing values[1]. The purpose is not to exactly predict the missing values but to be able to reflect the uncertainty around the imputation of missing values so that we can draw valid statistical inferences from the estimates (Stuart, 2010). Next, each of the *m* (e.g., *m*=5) multiply imputed datasets are separately analyzed; and finally, the separate results are pooled into one estimate. There is no consensus on how much missingness is considered "too much;" but good outcomes have been reported even with over 40% missingness (Stuart, 2010). Conventional wisdom is to generate 5-10 imputations, with larger numbers of imputations linked to increased power (Graham, Olchowski, & Gilreath, 2007). Given the high proportion of missing data on some variables, 20 imputations (*m*=20) were generated for the analyses. Results from the imputed data are presented in Table 4.4.

After presenting the findings from the longitudinal repeated measures analyses using both complete cases and imputed data, the study examined whether a mediational model holds by taking the four steps suggested by Baron and Kenny (1986).

RESULTS

Descriptive Statistics

Table 4.1 displays the general characteristics of the analytic sample from the ECLS-K dataset, while Table 4.2 shows the racial and ethnic differences in the main variables. Again, each child respondent can have up to three observations over the three time periods.

Asians and Whites on average scored above the mean math score of 121.18, whereas Blacks and Hispanics had mean scores below the overall average. The same is true of reading scores. The unstandardized mean scores of teachers' perceptions of children's learning attitudes were 3.07 ("sometimes") for 2002-2004 and 3.24 (between "most of the time" and "all of the time") for 2007, indicating that teachers generally perceived children to be displaying positive learning attitudes and behaviors. The mean ages of the ECLS-K children, moms, and dads were 11.65, 39.91, and 42.39 years, respectively. Also, the average parent expected their children to complete a 4- or 5-year college degree, and children showed a fair amount of interest and competence in math and reading (answering on average "mostly true"). Children also reported some internalizing problems, acknowledging it was a "little bit true" that they experienced loneliness, sadness, anger, shame, and worry over school tasks and peer relationships. About half of the sample children were male (51%); and over three-fourths (76-78%)[36] had parents who were married. Only 10% of the sample children had parents who were both born outside of the U.S. By race and ethnicity, 84% of Asian and 38% of Hispanic children were from families with immigrant parents while only two percent of White and six percent of Black children were from such families. The racial breakdown of the study sample is 5% Asian; 66% White; 16% Black; and 12% Hispanic.

[36] Summary statistics of marital status were obtained separately for each of the three waves—in 2002 and 2004, 76% of children had parents who were married; this number rose to 78% in 2007.

Table 4.1 Descriptive Statistics of ECLS-K Children (Waves 5-7; Unweighted)

Variables	Mean	Std. Dev.	Range	Obs (*n*)
Academic Achievement				
IRT Math Scores	121.18	29.34	34.56-172.2	16,894
IRT Reading Scores	149.87	31.88	51.49-208.9	16,813
Teacher Ratings				
Learning Attitudes 2002-2004	3.07	0.70	1-4	11,027
Learning Attitudes 2007	3.24	0.61	0.2-4	4,539
Parental Expectations	4.04	1.02	1-6	16,167
Children's Perceived Interest/Competence				
In Math	2.93	0.81	1-4	16,906
In English	3.00	0.75	1-4	16,900
Children's Internalizing Behavior	2.05	0.63	1-4	16,908
Sociodemographic Characteristics				
Child's Age	11.65	2.11	8-16	30,345
Child's Gender (Male=1)	0.51	0.50	0-1	30,354
Mom's Age	39.91	6.53	17-88	12,834
Dad's Age	42.39	6.91	19-83	10,920
Marital Status (Married=1)	0.77	0.42	0-1	16,181
SES	0.09	0.77	-2.49-2.58	16,209
Immigrant Status (Immigrant=1)	0.10	0.30	0-1	22,890
Asian	0.84	0.37	0-1	984
White	0.02	0.14	0-1	16,581
Black	0.06	0.23	0-1	2,997
Hispanic	0.38	0.48	0-1	2,328
Child's Race				
Asian	0.05	0.22	0-1	30,354
White	0.66	0.47	0-1	30,354
Black	0.16	0.37	0-1	30,354
Hispanic	0.12	0.33	0-1	30,354
Parental Involvement				
School Involvement(a)	-2.60e-09	0.56	-1.8-1.91	12,625
Help with Homework(a)	5.72e-09	0.90	-2.52-2.37	15,227
Household Rules about TV(a)	-1.66e-09	0.70	-2.10-0.73	15,924

Note: (a) Standardized scales with mean 0 and std. dev. 1.

Table 4.2 Racial/Ethnic Differences in the Main Dependent & Independent Variables (Weighted)

	Asian	White	Black	Hispanic
Academic Achievement				
Math IRT Scores	133.17 (3.37; *n*=476)	127.14† (0.89; *n*=9237)	109.45*** (1.82; *n*=968)	117.66*** (1.35; *n*=1047)
Reading IRT Scores	160.72 (2.20; *n*=477)	155.85* (1.02; *n*=9201)	136.86*** (1.71; *n*=962)	145.40*** (1.67; *n*=1042)
Teacher Rating(a)				
Learning Attitudes	0.41 (0.07; *n*= 436)	0.01*** (0.03; *n*= 8868)	-0.57*** (0.05; *n*=879)	-0.16*** (0.06; *n*=942)
Parent Expectations(a)	0.68 (0.12; *n*=504)	-0.10*** (0.03; *n*=9521)	-0.03*** (0.07; *n*=1024)	0.18** (0.07; *n*=1112)
Children's Perceived Interest/Competence(a)				
In Math	0.11 (0.09; *n*=476)	0.01 (0.03; *n*=9241)	0.13 (0.05; *n*=968)	-0.07† (0.06; *n*=1046)
In English	0.22 (0.07; *n*=476)	0.03* (0.02; *n*=9241)	-0.06** (0.06; *n*=968)	-0.08** (0.06; *n*=1046)
Internalizing Behavior(a)	0.01 (0.08; *n*=476)	-0.05 (0.02; *n*=9242)	0.12 (0.07; *n*=968)	0.17 (0.05; *n*=1046)

Note: Standard errors in parentheses.
The reference category for significance tests is Asians (***p<0.001; **p<0.01; *p<0.05; †p<0.10).
(a) Standardized to a mean of 0 and standard deviation of 1.

Table 4.2 shows whether there are differences across race and ethnicity in the main independent and dependent variables. Asians on average had significantly higher reading scores than all other races ($p<0.05$) and did better in math than Blacks and Hispanics ($p<0.001$). Asians on average also had higher math scores than Whites but this difference was only marginally significant ($p<0.10$). As for teachers' perceptions of children's learning attitudes, Asian children were rated as having better attitudes toward learning and school behavior than all other races ($p<0.001$), which is consistent with extant literature that find teachers to be positively biased toward Asian students and negatively biased toward other minority students, particularly Blacks. On average, Asian parents held significantly higher academic expectations for their children compared to their White ($p<0.001$), Black ($p<0.001$), and Hispanic ($p<0.01$) counterparts. With respect to child predictors, Asian children were no different from their counterparts in their perceived interest and competence in math; however, their perceived interest and competence in English were higher than those of their peers ($p<0.05$; $p<0.01$). There was no difference in

children's internalizing behaviors across race.

All in all, descriptive statistics on children's academic achievement, teachers' perceptions, and parental academic expectations support the conventional images of Asians as model minorities and as "Tiger Parents;" whereas those on children's perceptions and attitudes toward school subjects do not always show Asians having higher self-efficacy than their peers (i.e., in math). While existing studies on stereotype threat found that the fear and burden of negative stereotypes dampened the test scores of Black students, there is no indication Black students show more internalizing behaviors than their Asian peers in the analytic sample. Hence, there is only partial support for Hypothesis I as Asian children do not necessarily exhibit more confidence and less anxiety and fear than their non-Asian peers.

Longitudinal Repeated Measures Analysis

Complete-Case versus Multiple-Imputation Analyses. Table 4.3 shows the results of the multi-level analyses using complete cases (i.e., observations with no missing values on any of the variables in the analysis); while Table 4.4 displays the results of the multi-level analyses from the imputed data. There are some notable differences between the complete-case and multiple-imputation analyses. First, the magnitudes of the coefficients have changed, where they generally decreased in the imputed analyses. Also, for some variables, the direction and significance of the coefficients have changed. For instance, the effects of parental expectations on the math and reading performance of Asians (models 2 & 4) each changed from being negative in the complete-case analyses to being positive in the imputed analyses. However, the effects remained insignificant. As for significance, the effects of teachers' ratings and children's perceived interest and competence in reading on the reading scores of Asians each increased in significance in the model with the imputed data (model 4). Also, the coefficients on the interaction terms between parental expectations and Whites in both the math and reading models; between parental expectations and Hispanics in just the reading model; between perceived interest and competence in math and Whites; and between perceived interest and competence in math and Hispanics have all decreased in significance in the imputed analyses. However, the coefficient on the interaction term between perceived interest and competence in math and Blacks, which was insignificant in the complete-case analysis, turned marginally significant at $p<0.10$ in the imputed analysis. As for the control variables, neither parent's age mattered for

math and reading performance in the complete-case analyses; however, in the models with imputed data, father's age was positively associated with math scores ($p<0.01$) and mother's age with reading scores ($p<0.10$). Lastly, parental involvement at school was no longer significant in model 4 with imputed data.

Table 4.3 Longitudinal Repeated Measures Analysis of Academic Achievement (Complete Case), 2002-2007

	IRT Math (child *n*=3,275; obs=6,438)						IRT Reading (child *n*=3,273; obs=6,424)					
	Model 1			Model 2			Model 3			Model 4		
Wave (Reference = 2002)												
2004	19.055	***	(1.323)	18.992	***	(1.323)	15.744	***	(1.400)	15.641	***	(1.400)
2007	27.779	***	(3.279)	27.571	***	(3.278)	26.067	***	(3.459)	25.701	***	(3.454)
Race dummies (Reference = Asian)												
White	-0.652		(1.831)	-0.929		(1.930)	0.971		(1.927)	-0.853		(2.049)
Black	-12.026	***	(2.160)	-12.623	***	(2.272)	-8.391	***	(2.276)	-10.355	***	(2.411)
Hispanic	-6.319	**	(1.865)	-6.403	**	(1.975)	-3.352	†	(1.962)	-5.079	*	(2.097)
Main Effects (Asians in Models 2&4)												
Teacher ratings	2.882	***	(0.210)	2.945	**	(0.998)	3.937	***	(0.245)	3.069	*	(1.183)
Parental expectations	1.360	***	(0.225)	-0.241		(0.780)	2.303	***	(0.262)	-1.104		(0.913)
Perceived interest/competence	2.304	***	(0.193)	4.774	***	(1.045)	2.521	***	(0.228)	2.659	*	(1.157)
Internalizing problems	-1.234	***	(0.198)	-1.925	*	(0.894)	-1.906	***	(0.231)	-3.227	**	(1.043)
Interactions												
Teacher ratings X White				-0.135		(1.023)				0.748		(1.213)
Teacher ratings X Black				-0.318		(1.289)				2.105		(1.522)
Teacher ratings X Hispanic				0.465		(1.219)				1.120		(1.436)
Parental expectations X White				1.860	*	(0.817)				3.740	***	(0.955)
Parental expectations X Black				1.939	†	(1.098)				4.170	**	(1.277)
Parental expectations X Hispanic				0.763		(1.047)				3.024	*	(1.220)
Perceived interest/competence X White				-2.546	*	(1.065)				0.068		(1.183)
Perceived interest/competence X Black				-2.196		(1.392)				-0.372		(1.508)
Perceived interest/competence X Hispanic				-2.714	*	(1.226)				-1.861		(1.411)
Internalizing problems X White				0.769		(0.920)				1.623		(1.073)
Internalizing problems X Black				1.000		(1.179)				1.616		(1.383)
Internalizing problems X Hispanic				0.263		(1.134)				-0.739		(1.322)
Controls												
Child age	2.651	***	(0.650)	2.681	***	(0.650)	3.242	***	(0.684)	3.292	***	(0.683)
Chile gender	4.946	***	(0.613)	4.896	***	(0.613)	-2.326	***	(0.647)	-2.322	***	(0.646)
Mom age	0.092		(0.080)	0.086		(0.080)	0.090		(0.084)	0.079		(0.084)
Dad age	0.097		(0.069)	0.099		(0.069)	0.086		(0.073)	0.092		(0.073)
Marital status	3.294	***	(0.849)	3.293	***	(0.850)	3.550	***	(0.968)	3.447	***	(0.969)
SES of household	5.327	***	(0.338)	5.294	***	(0.338)	5.743	***	(0.365)	5.731	***	(0.365)
Immigrant status	-1.761		(1.361)	-1.707		(1.371)	-4.255	**	(1.438)	-3.900	**	(1.449)
Parents involvement at school	0.656		(0.403)	0.646		(0.404)	0.973	*	(0.469)	0.913	†	(0.468)
Parents help with homework	-1.666	***	(0.195)	-1.677	***	(0.195)	-1.779	***	(0.230)	-1.802	***	(0.229)
Parents have rules about watching TV	-0.428		(0.272)	-0.355		(0.273)	-0.128		(0.318)	-0.035		(0.319)
Intercept	68.459	***	(6.559)	68.647	***	(6.580)	94.589	***	(6.899)	96.272	***	(6.919)

Note: Standard errors in parentheses; ***p<0.001; **p<0.01; *p<0.05; †p<0.10

Table 4.4 Longitudinal Repeated Measures Analysis of Academic Achievement with Imputed Data, 2002-2007

	IRT Math (child *n*=10,118; obs: 30,354)						IRT Reading (child *n*=10,118; obs: 30,354)					
	Model 1			Model 2			Model 3			Model 4		
Wave (Reference = 2002)												
2004	21.023	***	(0.964)	21.007	***	(0.966)	18.819	***	(1.020)	18.809	***	(1.020)
2007	33.196	***	(2.357)	33.144	***	(2.361)	32.366	***	(2.524)	32.349	***	(2.525)
Race Dummies (Reference = Asian)												
White	-0.333		(1.091)	-0.271		(1.152)	1.965		(1.361)	1.435		(1.425)
Black	-13.891	***	(1.258)	-13.918	***	(1.298)	-11.556	***	(1.383)	-12.001	***	(1.450)
Hispanic	-6.848	***	(1.196)	-6.773	***	(1.259)	-4.793	***	(1.328)	-5.309	***	(1.384)
Main Effects (Asians in Models 2&4)												
Teacher ratings	2.557	***	(0.140)	3.053	***	(0.511)	3.407	***	(0.184)	3.432	***	(0.575)
Parental expectations	1.154	***	(0.133)	0.410		(0.448)	2.012	***	(0.189)	0.438		(0.572)
Perceived interest/competence	1.370	***	(0.123)	2.038	***	(0.456)	2.081	***	(0.158)	2.803	***	(0.575)
Internalizing problems	-1.051	***	(0.120)	-1.345	**	(0.444)	-1.315	***	(0.141)	-1.767	**	(0.526)
Interactions												
Teacher ratings X White				-0.519		(0.518)				-0.172		(0.591)
Teacher ratings X Black				-0.609		(0.557)				0.296		(0.688)
Teacher ratings X Hispanic				-0.445		(0.591)				0.188		(0.702)
Parental expectations X White				0.876	†	(0.461)				1.691	**	(0.609)
Parental expectations X Black				0.851	†	(0.498)				2.038	**	(0.688)
Parental expectations X Hispanic				0.429		(0.514)				1.171		(0.736)
Perceived interest/competence X White				-0.604		(0.447)				-0.657		(0.579)
Perceived interest/competence X Black				-0.926	†	(0.514)				-0.966		(0.644)
Perceived interest/competence X Hispanic				-0.891	†	(0.533)				-1.064		(0.714)
Internalizing problems X White				0.344		(0.454)				0.418		(0.559)
Internalizing problems X Black				0.368		(0.477)				0.870		(0.663)
Internalizing problems X Hispanic				0.128		(0.472)				0.303		(0.637)
Controls												
Child age	1.516	**	(0.473)	1.521	**	(0.473)	1.876	***	(0.505)	1.884	***	(0.505)
Chile gender	4.353	***	(0.457)	4.352	***	(0.457)	-2.745	***	(0.456)	-2.741	***	(0.456)
Mom age	0.081		(0.077)	0.080		(0.076)	0.173	†	(0.091)	0.172	†	(0.091)
Dad age	0.177	**	(0.064)	0.176	**	(0.064)	0.114		(0.075)	0.113		(0.075)
Marital status	1.478	***	(0.379)	1.478	***	(0.378)	1.587	**	(0.497)	1.588	**	(0.500)
SES of household	4.568	***	(0.241)	4.558	***	(0.241)	5.496	***	(0.308)	5.495	***	(0.309)
Immigrant status	-0.201		(0.908)	-0.109		(0.912)	-2.568	*	(1.158)	-2.432	*	(1.149)
Parents involvement at school	0.601		(0.423)	0.603		(0.423)	0.828		(0.534)	0.821		(0.534)
Parents help with homework	-0.886	***	(0.130)	-0.889	***	(0.131)	-1.047	***	(0.144)	-1.057	***	(0.144)
Parents have rules about watching TV	-0.037		(0.139)	-0.033		(0.140)	0.098		(0.215)	0.108		(0.217)
Intercept	76.753	***	(4.555)	76.719	***	(4.551)	102.655	***	(5.425)	103.180	***	(5.419)

Note: Standard errors in parentheses; ***p<0.001; **p<0.01; *p<0.05; †p<0.10

Racial and Ethnic Differences. Models 1 and 3 in both tables have race dummies but do not include interaction terms. In all four models without interaction terms (complete case and multiple imputation), the main predictors are consistently statistically significant at all conventional significance levels ($p<0.001$). Specifically, the more favorable the teachers' evaluation of children, the higher the parental academic expectations, the greater the self-efficacy and the lower the internalizing problems of children, the better children performed on math or reading tests. These results support Hypotheses A-D.

Models 2 and 4 in both tables show the moderating effects of race and ethnicity on the relationship between each of the main predictors and academic achievement. Here, I will report the results from the imputed analyses. The year dummies show that compared to the base year of 2002, children's math and reading scores on average have increased in subsequent waves ($p<0.001$). The coefficients of the race dummies indicate that when teacher ratings, parental academic expectations, children's perceived interest and competence in math and reading, and children's internalizing behaviors were held at their respective mean values (and all other variables were held constant), Blacks and Hispanics, on average, had significantly lower scores in math and reading than Asians. However, the difference between Asians and Whites when these four main predictors were held at their means was not statistically significant.

Since teachers' ratings, parental expectations, children's perceived interest and competence in math and reading, and children's internalizing behaviors each have an interaction term, the marginal effect of each of these predictors on academic achievement is the partial derivative,

$$\partial \text{Academic Achievement} / \partial \text{Predictor} = \beta_{\text{main effect}} + \beta_{\text{interaction}} \text{ RACE}$$

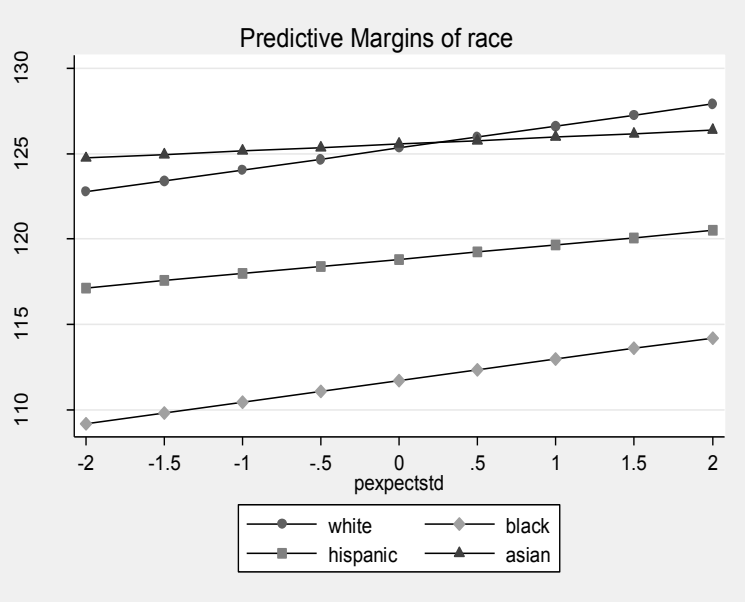
Each effect is necessarily zero only if all coefficients constituting the formula are zero. That is, the main and interaction effects should jointly be zero for there to be no effect. Wald test results (not presented in this chapter) demonstrate that teachers' ratings, parental expectations, children's perceived interest and competence in math and reading, and children's internalizing behaviors each matter for the math and reading performances of White ($p<0.001$), Black ($p<0.001$), and Hispanic ($p<0.01$) children.

Since Asians are the reference category, the main effects equal the marginal effects of the predictors on Asian children's academic performance. For every standard deviation increase

in teachers' ratings of children's learning attitudes and behaviors, math scores on average increased 3.053 points and reading scores 3.432 points for Asians ($p<0.001$). Parental expectations did not have a significant effect on the math or reading scores of Asian children; but children's perceived interest and competence in math or reading were positively associated with the academic performance of Asian children ($p<0.001$). Internalizing problems, on the other hand, had a significantly negative impact on their academic achievement ($p<0.01$).

To see whether these effects differed between Asians and the other racial and ethnic groups, the interaction terms were examined. As shown in Table 4.4, the interaction terms for parental expectations with Whites and Blacks were each positive and marginally significant at $p<0.10$ for the math model and positive and significant at $p<0.01$ for the reading model, indicating that parental expectations had a greater influence on the math and reading scores of Whites and Blacks than those of Asians. Specifically, a standard deviation increase in parental expectations raised math scores by an additional 0.876 and 0.851 points and reading scores by 1.691 and 2.038 points for Whites and Blacks, respectively, compared to Asians. No difference was observed in the effects between Hispanics and Asians. Figure 4.2 graphically represents the relationship between parental expectations and children's reading performance by race and ethnicity. The slopes for White and Black children (the second and last slopes) are steeper than that of Asian children (first slope); whereas the slope for Hispanic children is flatter than those of

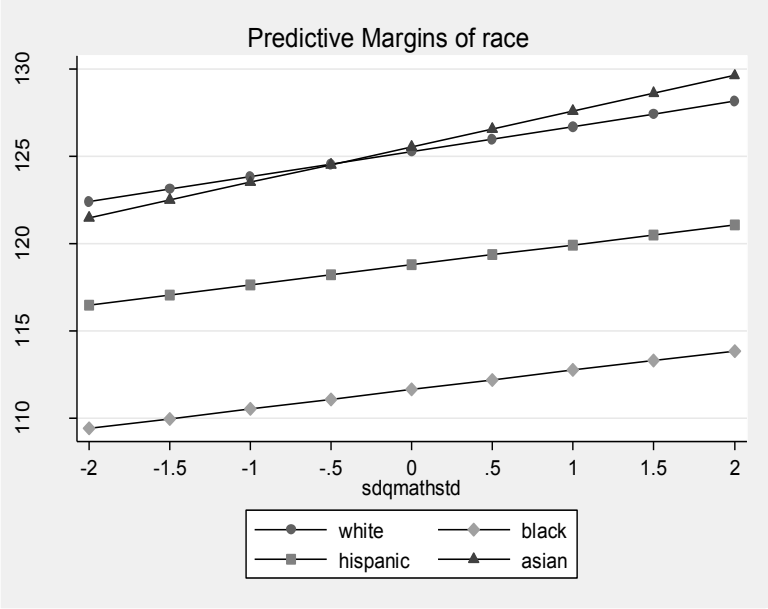
Figure 4.2 The Effects of Parental Expectations on Reading Scores by Race/Ethnicity



Whites and Blacks and more parallel to that of Asians[37].

Interaction terms for children's perceived interest and competence in math with Blacks and Hispanics were also marginally significant at $p<0.10$ but had negative signs, indicating that children's self-efficacy in math had a smaller impact on the math scores of Blacks and Hispanics than that of Asians. While the overall math scores increased by 1.11 and 1.15 points for Blacks and Hispanics, respectively, with a standard deviation increase in perceived interest and competence in math, Blacks and Hispanics each gained less than Asians by 0.926 and 0.891 points. There was no difference in the effects between Whites and Asians. Figure 4.3 is a graphical representation of the relationship between children's self-efficacy and math scores by race and ethnicity. The slope for Asians is steeper than those of Hispanics and Blacks.

Figure 4.3 The Effects of Children's Self-Efficacy on Math Scores by Race/Ethnicity



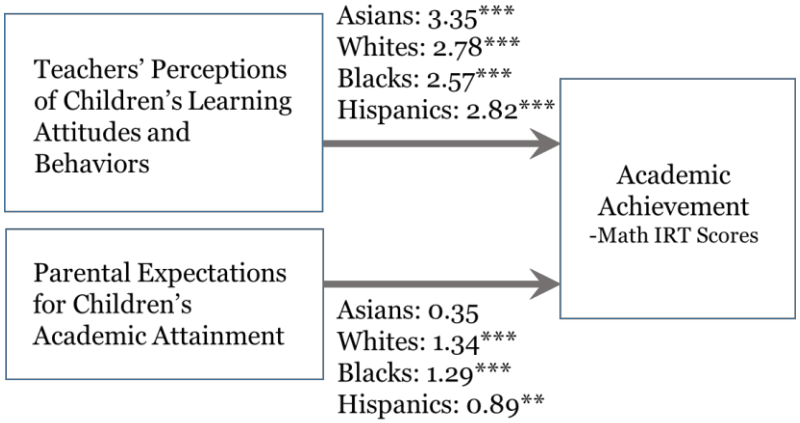
Additionally, the effects of teachers' ratings and children's internalizing behaviors on children's academic performance did not differ between Asians and the other racial and ethnic groups; and the strength of the relationship between children's self-efficacy and reading

[37] With respect to concerns about ceiling effects, further analyses will follow the dissertation. However, it can be preliminarily observed that the maximum possible scores for math and reading are 172 and 209 (Table 4.1), respectively, and that the Asian averages of 133 for math and 161 for reading (Table 4.2) are comparable to those of Whites, 127 for math and 156 for reading. Furthermore, the slopes for Asians and Whites are different. Therefore, it does not appear that the insignificant relationship between parental expectations and academic achievement for Asian children is due to a ceiling effect.

performance did not vary across race and ethnicity. All in all, the results partially support the hypothesis that the effects of the predictors on achievement vary by race and ethnicity.

As for the covariates, an additional year of age of the child increased math and reading scores by 1.521 ($p<0.01$) and 1.884 ($p<0.001$) points, respectively, *ceteris paribus*; and boys on average were better at math than girls by 4.352 points ($p<0.001$) while girls on average scored 2.741 points more in reading than boys ($p<0.001$), holding all else constant. Dad's age was positively associated with math performance ($p<0.01$) while mom's age was marginally significant for reading performance ($p<0.10$). Children with married parents on average performed better in math and reading, *ceteris paribus,* than children with non-married parents; and household SES had a positive impact on academic achievement, where a standard deviation increase in SES, on average, raised math scores by 4.558 points ($p<0.001$) and reading scores by 5.495 points ($p<0.001$). Coming from an immigrant household did not matter for math scores but did for reading scores, where children in immigrant households scored on average 2.432 fewer points in reading than children in non-immigrant households ($p<0.05$). Neither parents' involvement at school nor the existence of household rules about watching TV were significantly associated with academic achievement. However, children who received help with homework from their parents on average scored lower on math and reading tests than children who did not receive parental help with homework ($p<0.001$).

Figure 4.4 Step 1 of Baron & Kenny's (1986) Four Steps to Testing Mediational Model

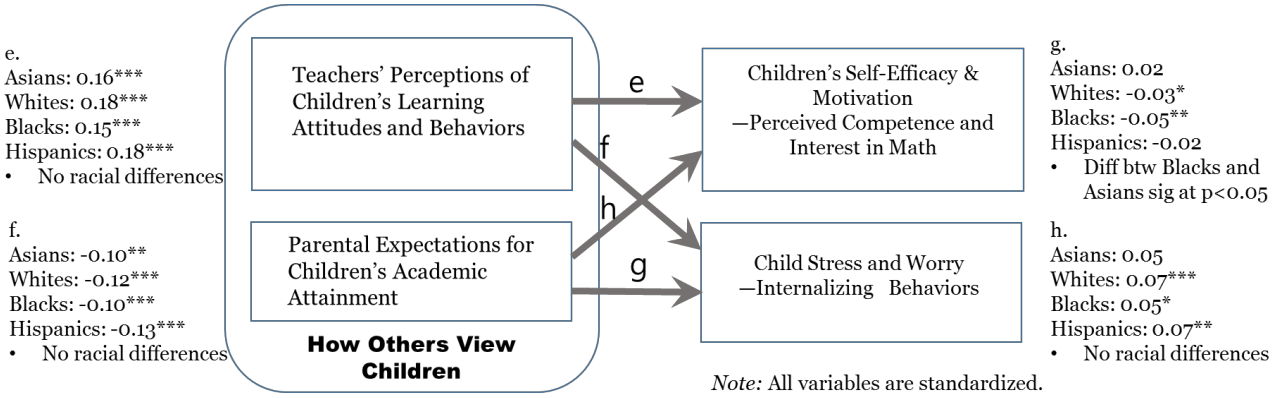


Testing Mediational Model. According to Baron and Kenny (1986), there are four steps to establishing a mediational model.[38] The results of the math and reading models being similar, only those of the math model are presented in the figures. Important differences between the two models are noted in the analyses. The first step is to show that the dependent variable, academic achievement, is correlated with the predictors, teachers' evaluation and parents' academic expectations (i.e., X→Y). As shown in Figure 4.4, teachers' evaluation of children was significantly positively correlated with academic achievement. Parental expectations were also positively correlated with academic achievement for all racial and ethnic groups except Asians.

The next step is to see whether teachers' evaluation and parents' expectations are correlated with the mediators, children's perceived interest and competence in math or reading and internalizing behaviors (i.e., X→M). As shown in Figure 4.5, most of the coefficients for paths *e-h* were significant (same for the reading model). Specifically, teachers' perceptions of children's learning attitudes and behaviors were positively associated with children's academic self-efficacy (path *e*) and negatively associated with children's internalizing behaviors (path *f*); however, the magnitude of the effects did not vary between Asians and the other groups. Higher parental expectations reduced the internalizing problems of Whites ($p<0.05$) and Blacks ($p<0.01$) but had no effect on the internalizing problems of Asians and Hispanics (path *g*). As for the racial differences in the effects, parental expectations had a significantly greater impact on the internalizing behaviors of Blacks than on the internalizing behaviors of Asians ($p<0.05$). Higher parental expectations also increased children's self-efficacy and motivation in math for all racial and ethnic groups except Asians (path *h*). However, the magnitude of the effects of parental expectations on children's academic self-efficacy did not differ between Asians and the others.

[38] Although Baron and Kenny (1986) originally suggested taking these four steps in OLS, Kenny, Korchmaros, and Bolger (2003) later update that the steps could also apply to other data analytic methods, such as logistic regressions, multilevel modeling, and structural equation models.

Figure 4.5 Step 2 of Baron & Kenny's (1986) Four Steps to Testing Mediational Model



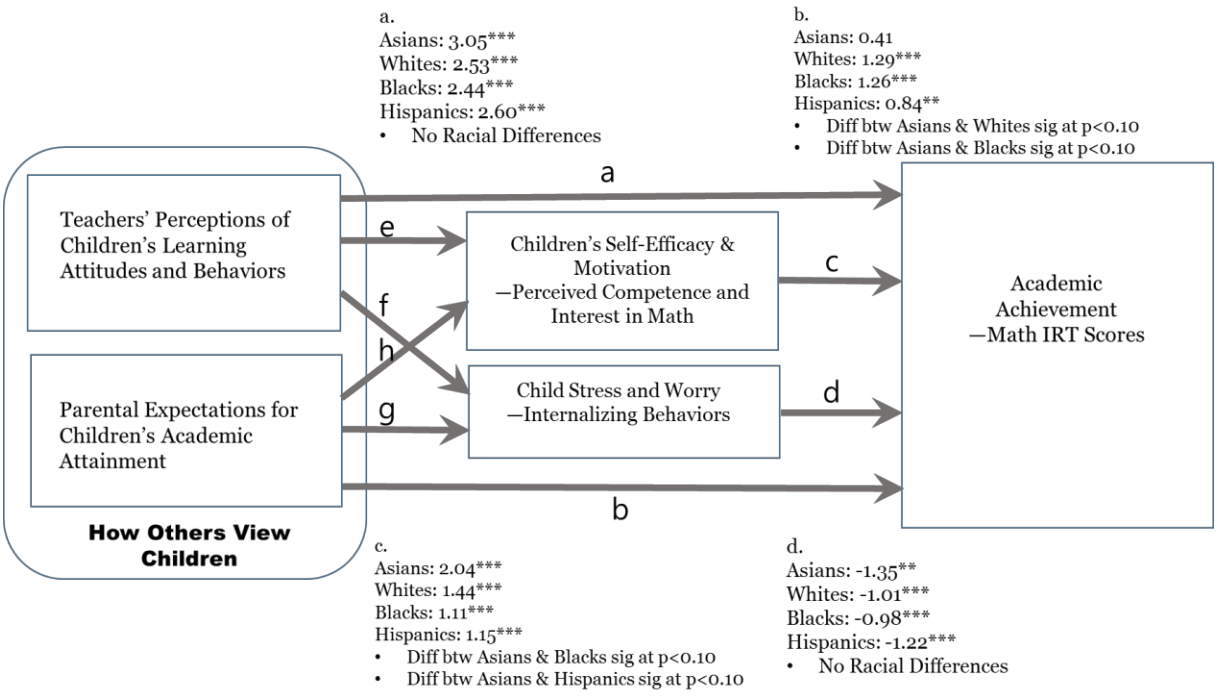
The third step is to show that the mediators, children's academic self-efficacy and internalizing behaviors, are associated with the outcome variable, academic achievement (i.e., M→Y), controlling for teachers' perceptions and parental academic expectations. As shown in Figure 4.6, all coefficients on paths *c* and *d* were significant, controlling for paths *a*, *b*, and *e-h*; hence, this step is satisfied. The effect of children's academic self-efficacy on math achievement is greater for Asians than for Blacks ($p<0.10$) or Hispanics ($p<0.10$). However, the effect of self-efficacy on reading scores did not vary between Asians and the other groups. Neither did the impact of children's internalizing behaviors on achievement.

The last step is to examine whether there is complete or partial mediation. For complete mediation, the effects of teachers' perceptions and parents' educational aspirations on academic achievement (i.e., X→Y) need to be zero[39], controlling for children's self-efficacy and internalizing behaviors (M). Since the coefficients on paths *a* and *b* are not zero but the first three steps are satisfied, a partial mediation model is implied.[40]

[39] As noted on David Kenny's website http://davidakenny.net/cm/mediate.htm, last updated on May 22, 2016, it is not the statistical insignificance of the coefficients of X, as originally stated in Baron and Kenny (1986), but the zero coefficients of X that suggest complete mediation.

[40] Baron and Kenny (1986) note that satisfying the four steps *indicates* but does not conclusively establish mediation.

Figure 4.6 Steps 3&4 of Baron & Kenny's Four Steps to Testing Mediational Model



DISCUSSION

Summary of Findings

Countering the genetic and cultural explanations for the racial and ethnic gaps in children's academic achievement, research has pointed to the socio-structural and psychological factors that affect the academic performance of minority children. Drawing on prior knowledge, this chapter explored whether 1) Asian children outperformed other groups in math and reading, received more positive teacher evaluations and higher parental expectations, and exhibited higher self-efficacy than their non-Asian peers; 2) the relationship between adult perceptions and children's academic outcomes was mediated by children's psychological states, such as the level of self-efficacy and internalizing problems; and 3) there were racial and ethnic differences in how the predictors were associated with children's academic achievement.

Based on extant literature, teachers were expected to be positively biased towards Asian children's learning attitudes and behaviors, and Asian parents were hypothesized to have higher educational expectations for their children than their non-Asian counterparts. The underlying assumption was that the model minority stereotype subconsciously shaped teachers' perceptions of Asian children and Asian parents' assessment of their children's chances for upward mobility.

The expectations and subtle cues by teachers and parents would then boost the self-efficacy of Asian children, leading to higher academic achievement.

The current study finds that adult perceptions and expectations were indeed biased in favor of Asian children. Asian children on average received more positive ratings from teachers on learning attitudes and behaviors and had parents with significantly higher academic expectations than did non-Asian children. However, without racial and ethnic priming, Black students in the analytic sample did not exhibit more worry and anxiety than others, and Asian students did not report feeling more efficacious and motivated in math than their non-Asian peers. It is interesting that compared to other children, Asian children felt more efficacious about reading but reported similar levels of perceived competency and interest in math, since a common component of the model minority stereotype is that Asian Americans are good at math and science (Yoo, Burrola, & Steger, 2010).

Confirming prior research, the current study further finds that favorable teacher evaluations of children, high parental academic aspirations, and children's high self-efficacy and low internalizing problems were all associated with the positive academic outcomes of children. Also, the results indicated a partial mediational model, where children's psychological states mediated the relationship between adult perceptions and expectations and children's academic achievement.

The study adds to existing knowledge of the adult and child predictors of children's academic achievement by exploring whether there are any racial and ethnic differences in how each of the predictors relates to children's academic achievement. All in all, it finds that all four predictors were important for explaining the academic achievements of White, Black, and Hispanic children. Parental expectations, however, were not important in predicting Asian children's academic performance. Furthermore, some of the effects of the predictors on children's academic achievement varied between Asians and the other racial and ethnic groups. For the same level of increase, parental expectations raised White and Black students' test scores more than they did the test scores of Asian students; children's self-efficacy, on the other hand, brought larger gains in math scores (but not in reading scores) for Asian children compared to their Black and Hispanic counterparts. All groups similarly benefited in academic achievement from the same level of positive change in teacher evaluations and suffered comparable drops in test scores from the same increase in children's internalizing behaviors. Also, there is partial

support for the hypothesis that adult perceptions and expectations influence children's psychological states differently for Asians and Blacks: that is, higher parental expectations were more effective in reducing the internalizing behaviors of Blacks than those of Asians.

Strengths and Limitations

The main contribution of the current study to existing research is that it explores whether there are any racial and ethnic differences in the mediational model of adult perceptions, children's psychological states and academic achievement. As Benner and Mistry (2007) have noted, there is a paucity of research on mediational models examining the mechanisms through which adult perceptions and expectations influence children's academic achievement. However, it was even more difficult to find studies that examined the moderating effects of race and ethnicity on children's academic achievement. The studies that do consider race and ethnicity tend to focus on one or two groups; and many tend to leave out Asians as a comparison group. Hence, the current study adds to existing research not only by examining the moderating effects of race and ethnicity on children's academic achievement in a mediation model but also by comparing across four major racial and ethnic groups.

The study draws on knowledge from the theories of stereotype threat and promise and attempts to clarify whether part of the achievement gap between Asians and Blacks can be attributed to the differing mean values on the predictors, which are subject to racial bias, or the differing effects of the predictors on academic achievement by race and ethnicity. It finds that teacher perceptions were important for children's academic achievement and that teachers on average rated Asian children much more positively than Black children, implying racial bias. Thus, it follows that there will be an achievement gap between Asian and Black children associated with the mean differences in teacher evaluations. Meanwhile, the effect of teacher perceptions on children's achievement did not differ between Asians and Blacks, indicating the achievement gap does not widen or shrink with the same level of change in teacher perceptions—put differently, the Asian-Black achievement gap will persist with the same level of change in teacher perceptions.

Contrary to the "Tiger Parent" thesis, high parental expectations were not the reason why Asian children performed well on tests. Asian parents did have greater expectations for their children's educational attainment than non-Asian parents, as Chua (2011) presumed and

others have found (Chen and Stevenson, 1995; Mau, 1997; Okagaki & Frensch, 1998; Peng & Wright, 1994; Suizzo & Stapleton, 2007); however, when all else was the same, Asian children with relatively high parental expectations did not perform better on tests than Asian children with relatively low parental expectations. This finding contradicts common perceptions and prior knowledge on Asian academic performance (Davis-Kean, 2005; Pearce, 2006; Peng & Wright, 1994).

Rather, parental expectations mattered more for the academic achievements of the other groups. While Black children had the lowest average test scores of all the groups, Black parents' educational expectations show the potential to reduce the Asian-Black achievement gap since parental expectations are more effective in raising Black children's academic performance than that of Asians. Additionally, parental expectations could indirectly influence Black children's academic performance by reducing their internalizing behaviors and raising their self-efficacy.

Next, children's self-efficacy was an important predictor of academic achievement, and the magnitude of the effect varied between Asians and Blacks (as well as Hispanics), where Asian children's self-efficacy translated into bigger gains in test scores compared to Black (and Hispanic) children. Hence, the achievement gap between Asian and Black (and Hispanic) children will widen with the same level of increase in self-efficacy. While internalizing problems predicted children's academic achievement, Asian and Black children did not differ in their mean levels of internalizing problems, nor did the effects on achievement vary between the two groups. The findings therefore suggest that the Asian-Black achievement gap cannot be attributed to children's internalizing problems.

Additional findings show that among minority children, Black children were the only group to benefit from the effect of parental expectations on children's internalizing problems. Research on stereotype threat show that Black children suffer academically from the fear, anxiety, and worry that racial cues trigger. Other studies find that high parental expectations, particularly for Black children, buffer the negative effects of low teacher expectations on children's academic achievement (Benner & Mistry, 2007) and that Black parents hold relatively high parental expectations compared to their children's actual academic performance partly because they are not convinced of the fairness of teacher evaluations (Lareau & Horvat, 1999; Ogbu, 2003; Yamamoto, Y., & Holloway, S.D., 2010). The current study findings, therefore, suggest that Black parents' expectations are effective in alleviating the fear and anxiety of Black

children that are likely triggered by the subtle racial cues from the education system and the larger society.

On the other hand, Asian children were the only group whose internalizing behaviors worsened when parental expectations increased, although it should be noted the association was insignificant. Prior studies have found that Asian parents' educational aspirations can work in both directions: High expectations can motivate and build confidence in children (Davis-Kean, 2005; Pearce, 2006; Peng & Wright, 1994); but it can also cause stress and worry about doing well and meeting up to unrealistically high expectations (Chu, 2002; Cohen, 2007; Wong & Halgin, 2006).

Methodologically, the current study uses a nationally representative sample of children who entered kindergarten in 1998 with a substantial number of Asian American children (n=540). Finding adequate data on Asian children that are reliable and nationally representative is not an easy task. Collecting a national sample of Asian Americans is expensive and complicated given the characteristics of the population (Gao, 2016)—that is, the Asian American population is relatively small (i.e., around five percent of the U.S. population), geographically concentrated in the East and West coasts, and linguistically diverse. Hence, the current study provides a unique opportunity to compare the social and psychological pathways to children's academic achievement between Asian children and their non-Asian peers.

Since children were observed repeatedly over time, the study relied on findings from a longitudinal repeated measures analysis, which accounts for the correlations among non-independent observations. Also, the present study chose to use standardized test scores as a measure of academic achievement to preclude subjective teacher bias in the assessment of achievement. A recent study explaining the Asian-White achievement gap using the ECLS-K (Hsin & Xie, 2014) found that it is academic effort—not cognitive ability or sociodemographic factors—that account for the achievement gap. However, their operationalization of both academic effort and academic achievement rely on teachers' ratings of students' behaviors, attitudes, and proficiency, which are subject to perceptional biases of the evaluator. Researchers have found that teachers, school administrators, and peers are positively biased in their evaluations of Asian students vis-à-vis other students, particularly other minorities, a tendency that has been attributed to the model minority stereotype (Lee, 2009; Lee & Zhou, 2014). Hence, it is not surprising the study finds a strong association between academic effort and achievement.

There are some important limitations to the study that should be noted. While stereotype threat and stereotype promise are the theoretical frameworks for this study, there are no direct measures of racial and ethnic stereotypes available in the data. Therefore, the study had to rely on the assumption that the observed racial and ethnic differences in teacher perceptions and parental expectations were due to the implicit bias from racial stereotypes and subconscious assessments of the socioeconomic opportunity structure.

Another limitation is that the study variables are not operationalized in such a way to account for the racial and ethnic gap in academic achievement, teacher evaluations, parental expectations, and children's self-efficacy and internalizing problems. That is, we learn about what factors contribute to the increase or decrease in test scores of individual children but not directly about what widens or shrinks the score gap between racial groups. The current study drew inferences about the racial/ethnic achievement gap given the results and theory, but it did not directly model the gap by operationalizing the variables to measure the test score differences between Asians and the other groups.

Additionally, the present chapter did not include a lagged dependent variable because the IRT scales are generated in such a way—the scores in each wave are based on all the test items of the previous wave—that endogeneity can become an issue if the previous wave's math or reading scores are included as controls in the model. Therefore, the model cannot control for various factors that presumably influence children's current academic achievement, such as children's academic ability and competence in the previous years.

Also, there were not enough observations in the study to draw meaningful inferences about Asian subgroups. Scholars have argued that the model minority stereotype could harm some Asian subgroups who consistently suffer from poor academic outcomes (Lee, 2009; Zhou & Lee, 2014).

Lastly, given the exploratory nature of the study, some of the findings are difficult to interpret and it needs to be seen whether the results can be replicated in future research. For instance, compared to Asian children, White and Black children showed similar patterns in the way parental expectations affected academic achievement. Also, contrary to existing knowledge, neither parental involvement at school nor rules about watching TV were important in predicting academic achievement; helping children with their homework seemed to backfire on the math

and reading performances of children, possibly because they fail to learn the necessary concepts when parents solve difficult assignments for them[41].

Conclusion, Policy Implications, and Future Directions

In sum, the current study found that the relationship between adult perceptions and expectations and children's academic achievement was mediated by children's psychological states, such as the levels of self-efficacy and internalizing problems. Some racial and ethnic differences were observed in how teacher perceptions, parental expectations, and children's self-efficacy and internalizing behaviors influenced children's academic achievement. Most notable is that while parental expectations did not explain Asian children's academic achievement, they were important in understanding Black children's internalizing problems and academic performance. Teacher perceptions were biased in favor of Asians and against Blacks, but the impact they had on achievement was equal between Asians and the others. While all children gained in achievement from enhanced self-efficacy, Black and Hispanic children gained less than Asian children in math scores given the same level of increase in self-efficacy. The detrimental impact of children's internalizing problems on academic achievement was equal between Asian children and their non-Asian counterparts.

The study findings provide insights for program and policy development aimed at teachers, parents, and children to reduce the negative effects of racial bias on children's academic achievement. First, teacher training programs should focus on the subtle ways in which racial bias can affect teachers' perceptions, interpretations, and evaluations of children. Perceptions and biases can lead to tangible differences in outcomes as Asian students were more likely to be placed in advanced academic tracks in high school, even those with average junior-high performance, and receive help with college applications than their non-Asian peers (Lee and Zhou, 2014). School administrators were also more open to and proactive in providing separate admissions standards and support programs, such as ESL (English as a Second Language) classes, to Asian students with limited English proficiency, which helped most of these students to smoothly advance to upper-level courses in subsequent years—comparable support could not be found for other minority students, such as Blacks (Lee, 2009). While the effects of teacher

[41] It could also be that children who were already struggling with these subjects required more help from their parents.

perceptions on achievement were equal between Asians and the others, average teacher ratings were highly biased in favor of Asian compared to Black children. This implies the playing field is not level since biased teacher perceptions would have contributed to the pre-existing achievement gap between Asian and Black children. Therefore, teacher interventions that have the same effects across racial groups will not close the pre-existing achievement gap. Teachers should be fair in how they perceive children but they should also be prepared to support minority children who struggle academically in other ways to boost their performances.

Additionally, given the important role of parental expectations in the academic achievement and internalizing behaviors of Black children, schools should actively reach out and encourage parents with low-achieving minority children to get substantively involved in the learning processes of their children. Since low-income minority parents often find it difficult to attend school events given their work schedules and lack of resources, school intervention programs that encouraged and counseled parents on supporting their children's learning at home were found to be the most effective (Henderson & Mapp, 2002). Schools can enhance parents' self-efficacy by providing practical educational information and resources, such as information on selecting school courses for their children, post-secondary educational options, and preparing for and filling out college applications.

All in all, the current study explored and found partial support for the argument that there are racial and ethnic differences in how adult perceptions and children's psychological states influence children's academic achievement. Future studies should use direct measures of racial and ethnic stereotypes to test if the bias found in teacher perceptions and parental expectations are indeed tied to these stereotypes. Also, studies should operationalize the variables to directly measure the racial and ethnic gaps in achievement, similar to the method used by Hsin and Xie (2014). Examining the patterns within and across Asian subgroups can shed more light on how the model minority stereotype affects Asian children, especially since scholars find the positive stereotype to both boost (Baumeister, Hamilton, & Tice,1985) and dampen (Cheryan and Bodenhausen, 2000; Shih, Pittinsky & Ambady, 1999) Asian children's academic performance. Lastly, given the findings that teachers are biased in favor of Asian and against Black children and that high parental expectations are effective in bringing positive psychological and academic outcomes for Black children, future studies should explore whether

teacher bias in schools can influence not only the performance of Black children but also the parenting expectations of children.

Chapter 5

Conclusion

CONTRIBUTIONS AND IMPLICATIONS

The main contribution of all three studies is that they aimed to move beyond the Black-White binary in explaining racial attitudes and children's achievement gap by including Asians in the equation of interracial relations and by incorporating the viewpoints of multiple racial groups. This section overviews the key findings, the limitations, and the research, practice, and policy implications that can be drawn from the study findings.

Key Findings and Contribution

Specifically, Chapter 2 adds to extant research by showing that interracial feelings and relations are not static. Depending on which racial stereotype is activated, people's relative psychological distance toward outgroups varies. More importantly, it is the first study to empirically show that such *relative* racial attitudes of individuals toward one outgroup vis-à-vis another outgroup are rooted in the *relative* group positions of Asians, Blacks, and Whites. Therefore, studies on racial stereotypes, interracial feelings, and discrimination should consider not only individual factors but also the sociostructural contexts that shape people's perceptions of themselves and others, which in turn can lead to preferential feelings and discriminatory acts.

Also, as predicted by the racial triangulation theory, system-legitimizing stereotypes work to divide minority groups from each other and in effect preserve the existing racial order. However, contrary to prior knowledge, minority groups do not blindly internalize stereotypes that are self-defeating and detrimental to their own group. In fact, minority groups selectively internalize the stereotypes that enhance their status relative to that of the other minority group and those stereotypes are the ones that motivate a minority group to identify with the dominant group vis-à-vis the other minority group.

Lastly, Chapter 2 shows that a "one-size-fits-all" approach to understanding racial attitudes, based on models developed from White attitudes, does not work to explain the distinct experiences, positions, and interests of racial minorities in the U.S. racial hierarchy. There are distinct patterns of racial attitudes by group, and many of the existing, classical theories which have developed around Whites' attitudes toward Blacks cannot be directly applied to Asians and Blacks. For instance, contact with Blacks led to more favorable attitudes by Whites toward Blacks relative to Asians, but the opposite was not true—that is, Whites did not necessarily feel closer to Asians vis-à-vis Blacks with more Asian friends. Also, symbolic racism did not explain Whites' *relative* emotional distance to Asians vis-a-vis Blacks, while it did predict that of Asians to Whites vis-à-vis Blacks. Realistic group conflict best explained Blacks' relative outgroup feelings than those of other groups.

Ordinal logistic results from Chapter 3 show that symbolic racism and political ideology were the most consistent and salient predictors of people's opinions on affirmative action policies. Also, the study finds partial support for the role of legitimizing myths in explaining attitudes toward affirmative action. The more Whites endorsed the view that Asians were harder working than Blacks, the less likely they were to express supportive views on affirmative action policies. As for Asians, the more aware they were of their outsider status, the more supportive they were of affirmative action policies. Although the association was only marginally significant, substantively, it suggests possibilities for empathizing with Blacks and prospects for coalition-building among marginalized groups. However, racial triangulation did not explain Blacks' views on affirmative action policies.

Chapter 4 adds to current knowledge by showing support for a moderated mediational model of children's educational achievement gap. Scholars have noted a paucity of research on mediational models that examined the mechanisms through which adult perceptions and expectations influenced children's academic achievement, as well as of research that explored the moderating effects of race and ethnicity on children's educational performance. The few studies that did consider race and ethnicity did not include Asians in their analyses. Chapter 4 shows that significant adults, such as teachers and parents, influence children's psychological states, which in turn affect children's educational achievement.

Moreover, the chapter focused on the patterns across four racial groups, with a particular emphasis on those of Asians and Blacks. The key findings of this chapter are significant because

they lend support to the underlying assumption that racial stereotypes, such as the model minority, subconsciously shape teachers' perceptions and parental expectations of children; the expectations and subtle cues by teachers and parents can either boost or hurt children's self-efficacy, or alleviate or intensify their internalizing problems, eventually affecting their academic performance. As for teacher perceptions, the chapter findings point to a bias in favor of Asian and against Black children.

All four predictors—teacher evaluations, parental expectations, children's self-efficacy, and children's internalizing problems–were important in explaining the academic achievements of White, Black, and Hispanic children. However, parental expectations did not explain Asian children's academic achievement, which directly challenges the "Tiger Parent" thesis—a proposition that attributes the academic success of Asian children to the strict and demanding parenting styles of Asian (generalized from Chinese) parents. The finding also resonates with those that show "Tiger Parenting" was not the most common form of parenting among Chinese Americans, nor did it produce optimal academic outcomes for children. In fact, the results of Chapter 4 suggest that parental expectations matter more for the academic performance of the other groups. Particularly, compared to Asians, Black parental expectations were found to be more effective in buffering the negative effects of low teacher expectations, reducing the internalizing behaviors of Black children, and raising their academic performance.

Implications and Future Directions

At the turn of the 21st century, sociopolitical interest in race relations and racial frameworks appeared to be dwindling. Ironically, as a post-racial society seemed to be within reach with the election of America's first Black president, racial conflict began to resurface and grab widespread media and public attention. This dissertation is another study that shows how race as a social construct can have real consequences for interracial feelings, policy preferences, and personal outcomes, such as educational achievement. Given these empirical findings across the three studies, this dissertation also argues that racial divides and structural inequalities are sustained by the societal myths that justify the current state of inequalities, such as poverty and low average educational attainment among Blacks and high proportion of immigrants among Asians.

Overall, the dissertation results support the theories of racial triangulation, stereotype promise, and stereotype threat, and it appears that system-legitimizing stereotypes divide and pit minority groups against each other. The findings in this dissertation focus on what divides racial groups from each other, especially the forces that prevent minority groups from identifying with each other and from recognizing their shared group interests as marginalized and excluded minorities.

Some findings are more concerning than others. Asians appear to be internalizing the model minority and perpetual foreigner stereotypes and to be identifying with the anti-Black sentiments of Whites, which in turn draw them away from Blacks vis-à-vis Whites and influence them to oppose minority policies such as affirmative action. Moreover, these racial frameworks seem to be endorsed by Whites as well as Blacks and have an impact on the perceptions, expectations, and preferences of these groups, which then can bring differential outcomes, such as educational achievement.

However, given the community-oriented nature of the social work profession, social workers can take advantage of the knowledge generated from this dissertation and put them into practice by developing action plans and policy recommendations. For instance, social workers can collaborate with others working with different ethno-racial communities to reduce inter-minority bias and build cross-racial coalitions to tackle systemic discrimination and inequalities. The dissertation lends insight into which beliefs social workers need to target and which distorted images get in the way of building constructive race relations.

For Asian communities, the presence of anti-Black attitudes has an impact on their outgroup attitudes and policy stances. Thus, tackling distorted images of Blacks should be incorporated in plans of cross-racial coalition building. Meanwhile, the perpetual foreigner stereotype appears to bring Asians to identify more with Blacks relative to Whites, including their support for minority policies as affirmative action. This sense of marginalization and exclusion can help Asians form a common ground with the experiences of other minorities such as Blacks and Hispanics.

However, it is also important for social workers to recognize that the perpetual foreigner stereotype works in the opposite direction for Blacks, drawing them away from Asians vis-à-vis Whites. With the Black community, beliefs about racial competition and threat need to be addressed in order to build a basis for interracial solidarity.

As for school social workers and education policymakers, the current findings suggest developing and carrying out teacher training and parental support programs that incorporate curriculum that directly addresses the racial stereotypes and implicit bias teachers and parents hold of not only their children but of each other—that is, teachers toward parents and vice versa. For instance, previous research has shown that Black parents tend to hold relatively high parental expectations given their children's actual academic performance, which could be attributed to their suspicion that teachers are biased against Black children (Lareau & Horvat, 1999; Ogbu, 2003; Yamamoto, Y., & Holloway, S.D., 2010). Given the effectiveness of Black parents' expectations in alleviating the fear and anxiety of Black children, likely triggered by the subtle racial cues from the education system and the larger society, and in boosting their academic performance, it would be a lost opportunity not to address the racial barriers, including racial perceptions and feelings, that exist in school settings and get in the way of building strong teacher-parent collaboration.

With respect to research implications, the dissertation has several limitations that can be improved upon in future research. First, as mentioned at the beginning of the dissertation, most of the analyses focus on Asians in relation to Whites and Blacks (although Chapter 4 does include Hispanics in the analyses). In other words, Hispanics, a salient and important group in understanding minority relations and politics, has not been included. Future work should incorporate the perspectives and positions of other salient ethnoracial groups, such as Hispanics, into the equation of racial attitudes and individual outcomes in order to derive findings that more closely represent the racial landscape of the U.S.

Also, the dissertation relied on large-scale secondary data due to the difficulties in collecting nationally representative primary data on various ethnoracial groups. Because the datasets were not intended to collect information on racial frameworks, the dissertation had to work with what was available and therefore the proxies for the model minority and perpetual foreigner stereotypes are far from perfect. Furthermore, Chapter 4 could not find proxies for the racial stereotypes and had to limit the scope of study to drawing inferences from these frameworks. Thus, future research should aim to collect more accurate data on various ethnoracial groups in the U.S. as well as develop more reliable and valid measures for the model minority and perpetual foreigner stereotypes. For instance, future conceptualization and operationalization of the model minority stereotype should include items not only on people's

perceptions of the difference in hard working patterns between Asians and Blacks but also on their perceptions about the difference in intelligence between these two groups. The NPS dataset did not have items on intelligence; thus, the dissertation relied on the hard-working stereotype of Asians to measure the model minority framework. Additionally, there needs to be more research on the diverse ethnic groups within the Asian race. The current datasets do not contain sufficient samples of Asian ethnic groups and therefore varying patterns of these ethnic groups could not be explored.

Lastly, the first two studies of the dissertation rely on cross-sectional analyses; and both the NPS and the ECLS-K are national but not nationally-*representative* datasets. The findings from Chapters 2 and 3 do not establish causality between racial frameworks and intergroup attitudes or between racial frameworks and racial policy preferences. Thus, future research should see whether these findings are replicable in designs that account for causality and endogeneity issues. As for generalizability, the NPS collects data across the nation from almost every state, but their samples cannot be said to be nationally-representative of the racial populations in the U.S. Similarly, the ECLS-K is a nationally-representative dataset of kindergarten children in 1998 that are followed through subsequent waves. Since the dissertation uses the third, fifth, and eighth grade data to generate findings, these results cannot be generalized to the entire third-grade population in 2002, to all fifth-graders in 2004, and all eighth-graders in 2007.

The aforementioned limitations notwithstanding, the dissertation contributes to existing knowledge by moving beyond the conventional Black-White dichotomy in explaining racial attitudes and children's achievement gap. The dissertation took a novel approach in modeling the racial frameworks that position Asians vis-à-vis Blacks and Whites, and how these relative group positions impact interracial psychological distance, racial policy attitudes, and child outcomes.

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